METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF FEBRUARY, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[*Price*, 6*d*.] 3*a* 13—13

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 34′ 2″ East.

FEBRUARY, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.

Highest Reading	30·074	... On the 3rd, at 9 a.m.
Lowest Reading	29·494	... On the 22nd, at 3 p.m.
Mean Height	29·801	

(Being 0·001 in. less than that in the same month on an average of the preceding 14 years.)

WIND .. ..

Greatest Pressure... ...	34·4 lbs.	... On the 25th.
Mean Pressure	0·6 lb.	
Number of Days Calm ...	0	
Prevailing Direction ...	N.E.	

(Prevailing direction during the same month for the preceding 14 years S.)

TEMPERATURE

Highest in the Shade ...	80·9	... On the 10th.
Lowest in the Shade ...	57·8	... On the 2nd.
Greatest Range	17·8	... On the 6th.
Highest in the Sun ...	123·0	... On the 6th.
Highest in a Black Box with Glass Top	203·0	... On the 5th and 7th.
Lowest on the Grass ...	51·2	... On the 3rd.
Mean Diurnal Range ...	12·7	
Mean in the Shade ...	70·5	

(Being 0·3 less than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..

Greatest Amount... ...	100·0	... On the 25th.
Least	56·0	... On the 3rd, 6th, and 8th.
Mean	76·3	

(Being 2·0 greater than that of the same month on an average of the preceding 14 years.)

RAIN .. ..

Greatest Fall	8·900 inches.	On the 25th.
Number of Days	16 rain and 6 dew.	
Total Fall	17·814 inches.	65 ft. above the ground.
	18·556 inches.	15 inches above the ground.

(Being 12·742 inches greater than that of the same month on an average of the preceding 14 years.)

EVAPORATION Total Amount ... ... 5·280 inches.

OZONE .. .. Mean Amount ... ... 3·9

(Being 0·6 less than that in the same month on an average of the preceding 13 years.)

ELECTRICITY .. Number of Days Lightning 9

CLOUDY SKY ..

Mean Amount	7·1
Number of Clear Days ...	2

METEORS .. Number Observed ... 1

REMARKS.

The mean barometer and thermometer at Sydney for the month are almost exactly the average of the past fourteen years, but the prevailing wind has been N.E., bringing with it cloudy weather and much rain, especially on the Coast. The rainfall on the 25th, at Sydney, is the heaviest on record here, but the amounts at Wilton, Cordeaux River, and Wollongong were even greater. The total amount for the month at the Stations varied from 23·770 in. at Cordeaux River to 0·360 at Thargomindah. The heavy rain of the 25th and 26th did much damage in Sydney and the Country Districts. The Hawkesbury rose 40 feet at Windsor, and submerged all the low lands. At Liverpool, the flood in George's River was the greatest ever known there; several houses were swept away, and many farmers were for the time washed out. At Berrima the flood was higher than any previously known, and rose 10 feet over the bridge. Some damage was done to the Railway between Liverpool and Picton. At Cooma the flood was the greatest on record. One hundred and fifty-seven thunderstorms were recorded; and hail on the 11th, 18th, 20th, and 25th.

At Deniliquin, on the 12th, there was an immense flight of grasshoppers, lasting two hours. The lower line of flight was only three feet from the ground, and the quantity sufficient to darken the sky.

SYDNEY, FEBRUARY, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.	Cl. Sc. Cu. Th. at 9
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water. 9 a.m.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.		Mean 9.3.9.		
1		30·161	S.	273	67·3	60·8	72·8	60·6	12·2	66·7	109·5	56·1	71·4	66·3	0·020	
2	In Equat.	·209	E.S.E.	151	66·3	63·0	74·7	57·8	16·9	66·3	110·3	51·4	71·2	81·0	0·006	1
3		·238	E.	260	72·0	64·1	76·1	60·0	16·1	68·1	121·0	51·2	71·4	61·7	·0	
4	First Qr.	·208	E.N.E.	183	69·4	65·3	74·0	62·9	11·1	68·5	103·0	58·3	71·6	78·0	0·103	
5		·127	E.N.E.	124	69·2	65·7	75·8	62·6	13·2	69·2	120·6	56·8	71·2	81·0	0·018	
6		·091	N.N.E.	129	71·4	64·3	79·4	61·6	17·8	70·5	123·0	56·1	71·0	65·0	0·003	
7		·050	N.E.	191	72·4	65·4	77·1	60·3	16·8	68·7	117·0	53·7	71·4	65·9	0·001	
8		·066	N.E.	114	71·9	64·5	77·4	61·0	16·4	69·2	118·5	61·1	71·0	64·3	·0	1
9	G. N. Dec.	29·915	W.	263	69·4	65·3	78·2	65·8	12·4	72·0	117·7	59·1	71·6	77·0	·0	1
10		·802	S.	270	72·2	67·2	80·9	64·9	16·0	72·9	119·4	59·0	71·4	75·7	0·006	
11		·976	E.S.E.	222	67·8	64·2	72·4	63·1	9·3	67·8	113·8	58·7	71·6	80·3	0·363	1
12	Full Moon Apogee	·947	S.	414	67·0	61·1	71·3	61·0	10·3	66·2	108·9	56·1	71·8	69·3	0·902	
13		30·150	S.	190	69·3	64·4	74·3	60·9	13·4	67·6	116·2	56·0	71·4	74·7	0·004	
14		·202	N.N.E.	186	71·9	66·1	76·8	62·6	14·2	69·7	118·8	56·7	71·2	70·3	0·001	
15		·095	N.E.	287	73·6	67·0	78·2	63·1	15·1	70·7	119·8	56·1	71·6	67·3	0·001	
16	In Equat.	·027	N.N.E.	297	75·4	68·0	78·7	66·8	11·9	72·8	116·9	59·1	71·2	64·0	·0	
17		·013	N.E.	263	75·6	68·9	80·2	66·3	13·9	73·3	118·3	59·0	71·6	67·0	·0	
18		·153	E.N.E.	140	74·5	68·1	80·1	65·7	14·4	72·9	119·1	60·1	71·0	68·7	0·001	
19		·057	N.E.	326	74·0	68·2	80·2	65·0	15·2	72·6	121·9	59·2	71·4	71·3	0·001	
20	Last Qr.	29·918	N.E.	294	74·4	69·3	79·7	68·2	11·5	74·0	119·9	61·1	71·0	74·3	·0	
21		·966	W.	142	71·4	68·9	79·1	68·4	10·7	73·8	116·6	63·4	71·6	86·3	0·037	1
22		·771	W.S.W	147	70·1	68·3	77·2	66·2	11·0	71·7	116·0	62·0	71·2	90·0	0·430	
23	G. S. Dec.	·738	N.E.	329	73·6	70·1	77·0	64·5	12·5	70·8	116·5	59·6	71·4	81·0	0·642	
24		·798	N.E.	494	69·4	67·0	72·8	64·7	8·1	68·8	94·6	61·1	71·0	86·0	2·175	1
25		·856	E.N.E.	595	69·8	69·7	73·0	66·2	6·8	69·6	95·9	62·1	71·2	99·3	8·900	1
26		·841	N.N.W	164	72·7	70·1	79·4	66·5	12·9	73·0	119·2	61·1	71·4	85·7	4·930	
27	New Moon Perigee.	·901	N.E.	212	74·3	72·8	79·5	69·5	10·0	74·5	120·0	63·2	71·0	91·0	0·011	1
28		·835	N.E.	289	70·6	69·7	74·8	69·8	5·0	72·3	99·0	65·7	71·6	94·0	0·001	1
Means	.....	30·004	N.E.	6949	71·3	66·7	76·8	64·1	12·7	70·5	114·7	58·7	71·3	76·3	Sum. 18·556	

Observations of Standard Barometer taken at 9 a.m., corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·039 above the true mean for the day. Heavy dew 6th, 7th, 14th, 15th, 18th and 19th.

SYDNEY, FEBRUARY, 1873.

TE.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	REMARKS.
1	0·226	2·0	4·5	3·3	1.—Cloudy. Fresh breeze.
2	0·132	...	...	2·5	2.—Fine at 8 p.m. Light rain at 9·12 a.m.
3	0·251	1·5	5·0	3·3	3.—Cloudy and showery. Partial clearing S.E. at 9 p.m.
4	0·128	4·0	5·0	4·5	4.—Fine at 9 p.m. Showery. Meteor observed E. at 8·50 p.m.
5	0·221	4·0	...	...	5.—Fine after 1 p.m. Fresh dry breeze all afternoon.
6	0·275	2·5	1·5	2·0	6.—Fine after 1 p.m. Forenoon very warm.
7	0·302	1·0	1·5	1·3	7.—Cloudy. Very warm. Fresh breeze.
8	0·196	3·0	3·5	3·3	8.—Cloudy. Very warm. Fresh breeze.
9	0·184	...	...	2·8	9.—Cloudy, dull. Light showers in the morning. Thunderstorm from W. from 4·12 p.m. until 6·45 p.m. Lightning all evening. Steady rain at 10 p.m.
0	0·209	5·0	5·5	5·3	10.—Cloudy. Thunderstorm, 2·18 p.m. ; very heavy at 5·30 p.m. ; raining heavily, 5·52 p.m. ; storm ended at 8·30 p.m. Lightning vividly during storm.
1	0·170	3·5	5·5	4·5	11.—Cloudy. Steady rain all morning from 8 a.m., also during afternoon and evening. Rainbow E., 4 50 p.m.
2	0·290	1·5	5·0	3·3	12.—Cloudy. Strong breeze. Evening cloudy and fine alternately, with light showers. S. squall at 8·35 p.m. Electrometer 0° to 90°.
3	0·215	1·0	1·5	1·3	13.—Fine after 2 p.m. Forenoon dull. Dew falling in the evening.
4	0·242	1·5	1·0	1·3	14.—Fine. Fresh breeze. Very warm.
5	0·316	3·5	5·0	4·3	15.—Cloudy from 6 p.m. until about 7 p.m. Fresh breeze all day and very dry. Very warm. No clouds visible in the evening.
6	0·296	...	...	2·5	16.—Fine. Very warm. Fresh breeze until evening.
7	0·293	5·5	5·0	5·3	17.—Fine. Very hot. Fresh breeze. Planet Venus distinctly seen with the naked eye at 4·15 p.m.
8	0·269	2·0	3·0	2·5	18.—Morning cloudy. Light drops of rain at 9·36 a.m. Fresh breeze all day. Planet Venus seen at 3 p.m. with the naked eye.
9	0·272	3·5	4·0	3·8	19.—Cloudy and very hot. Strong breeze all day. Clouds cleared towards evening and turned cloudy again at 8 p.m. Lightning W. at 10 10 p.m.
0	0·255	4·0	5·0	4·5	20.—Fine until noon and very hot. Thunderstorm from W. to E. from 4·8 p.m. until 7 p.m., and again S. at 8·12 p.m. Lightning all evening from 6·16 p.m., also light rain.
1	0·076	5·0	5·5	5·3	21.—Cloudy, very dull and warm. Thunderstorm from 5·40 p.m. until 6·5 p.m. Steady rain from 4·25 p.m. Heavy rain from 5 p m. until after 7 p.m. Lightning N.E. during evening.
2	0·170	4·5	5·5	5·0	22.—Fine from noon until 4 p.m. and very warm. Light rain, 9 a.m. Thunderstorm from 6·5 p.m. until 6·20 p.m. Rain at 5·40 p.m. Lightning N.E., S.W., S., and W. during evening.
3	.....	...	...	4·8	23.—Cloudy. Light showers 11·16 a m. and 11·59 a.m., and very heavy rain all evening. Thunderstorm from 6·12 p.m. until 7 p.m. Lightning during storm from 6 46 p.m.
4	.....	8·0	5·0	6·5	24.—Cloudy, very dull and showery. Fresh breeze all day.
5	.....	8·0	7·0	7·5	25.—Cloudy, very dull and stormy. Very heavy rain all morning from 12·30 a.m. until after 12·30 p.m. A lighter rain fell during the rest of the day.
6	0·123	3·0	2·5	2·8	26.—Cloudy. Very warm. Thunder W. at 4·21 p.m. and 9·5 p.m. Lightning S.E. at 9·3 p.m. ; very vivid at 10 30 p.m. Showers 8·30 p.m. and 10·50 p.m.
7	0·131	5·0	6·0	5·5	27.—Cloudy, very dull and sultry. Fresh breeze. Lightning W. at 8·20 p.m. Dropping rain at 10 35 p.m.
8	0·038	6·5	4·5	5·5	28.—Cloudy and very dull. Raining lightly at intervals during the afternoon and evening, commencing at noon.
	Sum.				
eans	5·280	3·7	4·2	3·9	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																			
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.
1	29·990	30·024	10 p.m.	29·962	2,3,&4 p.m.	13	3	2	2	4	...	...	...	...	...	...	...	...	...	...	...	273	11·4	0·6	2·6 S. 4·23 p.m.
2	30·042	30·056	9 p.m.	30·024	2 p.m.	3	...	...	...	6	...	...	...	...	...	...	...	2	8	4	1	151	6·3	0·2	1·1 S.E. 2· 5 p.m.
3	30·038	30·074	9 a.m.	30·005	3 & 4 a m.	...	...	...	1	...	...	...	...	4	1	1	2	13	2	...	...	260	10·8	0·6	4·2 E. 1·10 p.m.
4	29·956	30·039	9 a.m.	29·898	3 & 4 a.m.	...	...	...	2	...	...	...	3	...	1	4	8	6	...	...	...	183	7·6	0·3	2·6 E. 5·57 p.m.
5	29·908	29·964	9 a.m.	29·871	4 p.m.	...	...	...	...	...	...	...	...	1	3	2	10	8	...	...	...	124	5·2	0·1	1·4 E. 5· 5 p.m.
6	29·885	29·935	12 a.m.	29·832	3 a.m.	...	...	...	...	...	...	...	...	2	8	...	...	7	4	3	...	129	5·4	0·1	0·7 E.S.E. 2·30 p.m.
7	29·849	29 884	9 a.m.	29·807	3 p.m.	...	...	...	...	...	...	...	...	2	...	17	5	...	...	...	...	191	8·0	0·3	1·6 E.N.E. 3· 0 p.m.
8	29·802	29·900	9 a.m.	29·715	4 a.m.	...	...	..	...	...	...	...	...	...	...	11	8	5	...	...	...	114	4·8	0·1	0·7 E.N.E. 3·30 p.m.
9	29·635	29·752	9 a.m.	29·590	{5 p.m., 2, 6 & 7 a.m.	...	...	1	2	5	4	...	1	1	2	5	3	...	..	...	...	263	11·0	0·6	3·9 W. 9 20 p.m.
10	29·700	29·806	8 a.m.	29·604	2 p.m.	8	2	...	3	...	1	...	...	...	..	...	...	...	...	6	4	270	11·3	0·6	5·8 S.S.W. 7·40 p.m.
11	29·735	29·811	9 a.m.	29·686	3 a.m.	1	...	3	2	...	...	...	...	...	...	...	...	4	6	5	3	222	9·3	0·4	1·6 S.S.W. 8·40 a.m.
12	29·861	29·967	8 a.m.	29·777	10 a.m.	10	7	7	...	...	...	...	...	...	...	...	...	...	...	...	...	414	17·3	1·5	6·1 S. 2·56 p.m.
13	29 987	30·046	8 a.m.	29·946	5 p.m.	5	1	...	...	...	...	...	...	1	1	2	4	4	5	...	1	190	7·9	0·3	2·0 S. 11·0 a.m.
14	29·946	30·037	9 a.m.	29·887	3 a.m.	...	...	...	...	...	...	...	...	1	13	5	5	...	...	...	...	186	7·8	0·3	2·9 N.E. 5·55 p.m.
15	29·851	29·933	9 a.m.	29·815	4 a.m.	...	...	...	...	...	...	...	...	4	8	12	...	...	...	...	...	287	12·0	0·7	3·4 N.E. 2·42 p.m.
16	29·813	29·865	9 a.m.	29·769	5 p.m.	...	...	...	...	...	...	...	...	1	13	9	1	...	...	...	...	297	12·4	0·8	4·5 N.E. 5·25 p.m.
17	29·877	29·984	8 a.m.	29·800	3 p.m.	...	...	...	...	...	...	...	...	1	11	11	1	...	...	...	...	263	11·0	0·6	5·1 N.E. 3·40 p.m.
18	29·918	29·990	9 a.m.	29·860	4 a.m.	...	...	...	...	...	...	...	...	4	4	6	10	...	...	...	...	140	5·8	0·2	1·4 E.N.E. 1· 5 p.m.
19	29·788	29·893	9 & 10 a.m.	29·741	5 a.m.	...	...	...	...	...	1	1	1	2	8	10	1	...	...	...	...	326	13·6	0·9	4·2 N.E. 12·34 p.m.
20	29·730	29·776	8 a.m.	29·676	4 p.m.	3	2	...	4	2	1	...	...	...	4	6	2	...	...	...	...	294	12·3	0·8	3·9 N.E. 2·55 p.m.
21	29·706	29·800	9 a.m.	29·607	8 a.m.	4	3	1	2	6	2	...	...	...	...	...	2	1	...	1	2	142	5·9	0·2	1·0 S. 12·5 p.m.
22	29·559	29·608	9 a.m.	29·494	3 p.m.	3	3	1	5	2	3	...	...	...	...	...	1	2	2	1	1	147	6·1	0·2	1·3 E.S.E. 6·30 p.m.
23	29·570	29·616	8 a.m.	29·543	1 & 2 p.m.	2	...	...	...	...	...	...	...	...	...	9	5	6	...	1	1	329	13·7	0·9	4·2 E.N.E. 9·50 p.m.
24	29·661	29·709	9 p.m.	29·632	10 a.m. & 4 p.m	...	...	...	...	...	...	...	...	...	6	7	6	3	2	...	...	494	20·6	2·1	9·2 N.E. 7·30 a.m.
25	29·642	29·687	9 a.m.	29·610	3 a.m.	...	...	...	...	5	2	...	...	...	...	3	12	2	...	...	...	595	24·8	3·1	34·4 E.N.E. 4·23 p.m.
26	29·677	29·727	8 a.m.	29·635	4 p.m.	...	...	...	...	1	1	...	10	2	2	4	3	1	...	...	..	164	6·8	0·2	2·0 N.E. 3·25 p.m.
27	29·697	29·739	9 p.m.	29·656	6 a.m.	...	...	...	...	3	...	...	1	...	1	12	7	...	...	...	...	212	8·8	0·4	2·0 E.N.E. 3·20 p.m.
28	29·600	29·676	10 a.m.	29·549	4 p.m.	...	3	3	1	...	...	...	...	...	5	9	2	...	...	1	...	289	12·0	0·7	4·2 N.E. 4·12 p.m.
Sums or Means.	29·801	Feb. 3rd. 30·074 9 a.m.		Feb. 22nd. 29·494 3 p.m.		52	24	18	24	34	15	1	16	26	91	145	98	64	29	22	13	Sum 6949	Mean. 10·4	Mean. 0·6	

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of FEBRUARY, 1873.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., February, 1873.										For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.	Temperature in Shade.				Rain.				Evaporation. in inches.
						Direction	Force. 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	29·999	81·3	46·0	.....	...	...	89·9	72·6	98·4	63·0	0·360	1	0·360	22	...
Centerfield ...	80	...	...	61·5	...	N.E.	1·8	...	68·5	54·5	79·1	46·0	1·107	3	0·700	27	2·520
Grafton	22	...	...	75·7	...	E.	0·7	7·0	85·9	65·4	95·1	59 2	4·615	12	0·890	25	3·545
Bourke	393	...	...	80·6	...	S.	0 0	1·0	93·4	67·8	108·4	52·9	0·820	5	0·440	4	...
Narrabri	196	...	...	80·3	...	S.W.	1·3	2·0	93·4	67·1	100·9	60·5	1·850	7	0·800	22	6·338
Armidale.....	80	3278	30·111	65 6	70 0	E.	1·2	5·5	77·4	53·7	95·2	50·1	3·670	8	1·500	24	...
Port Macquarie	0	...	...	71·1	...	W.	1·4	6 2	77·9	64 2	82·6	58·7	19·005	16	6·780	25	3·556
Murrurundi ...	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	73·8	...	S.E.	0·7	3·2	85·2	62·3	97·1	53·2	2·010	6	0·720	21	5·039
Muswellbrook..	68	...	...	73·8	...	W.	2·0	...	85·8	61·8	97·5	53·3	4·940	9	1·570	11	5·143
Dubbo	182	...	...	70·1	...	N.E.	0·5	...	85·2	65·0	92·9	58·9	2·730	4	1·330	21	4·902
Mudgee	121	...	...	72·6	...	E.	0·6	...	83·7	61·5	94·4	54·0	2·158	3	1·407	22	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	6·240	13	...	...	...
West Maitland	18	...	...	72·4	...	E.	1·1	7·2	81·1	63·6	93·8	56·7	4·850	12	1·350	25	4·695
Lambton	7	...	...	66·6	...	S.E.	1·2	...	76·3	56·8	88·3	51·0	7·740	16	2·000	25	4·322
Newcastle	1	112	30·091	70·5	82·0	N.E.	0·1	5·0	76·9	64·0	87·3	58·1	8·000	15	2·230	12	...
Orange.....	124	2891	...	65·5	...	E.	1·5	...	74·7	56·2	84·7	49·5	4·390	9	1·640	22	3·354
Bathurst	96	2200	29·934	67·5	92·0	N.E.	1·1	4·3	82·1	52·8	93·5	47·0	5·090	7	2·200	22	...
Kurrajong	36	1870	...	62·0	...	E.N.E.	...	...	68·5	55·6	79·0	50·0	8·200	14	1·700	20	...
Mount Victoria	61	3490	29·961	64·8	73·0	W.	0·0	6·3	75·9	53·6	88·1	44·9	8·940	14	2·270	25	7·179
Woodford	50	2192	29·896	65·2	...	N.	0·6	...	70·1	60·3	79·5	53·4	11·890	17	3·350	25	...
Parramatta.....	16	...	...	68·6	...	N.W.	0·8	6·1	83·8	53 4	92·2	45·9	9·220	15	3·510	26	...
Sydney.....	5	155	30·004	70·5	76·3	N.E.	0·6	7·1	76·8	64·1	80 9	57·8	18·556	16	8·900	25	5·307
Liverpool.....	16	...	30·007	69·5	...	S.	0·4	6·2	78·1	60·8	86·0	53·0	14·085	17	5·410	26	...
Wentworth.....	476	...	...	76·4	...	S.W.	1·8	2·9	88·7	64·0	107·3	52·5	1·350	9	0·680	26	8·176
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	18·450	11	9·050	26	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	23·770	16	10 980	26	...
Young	140	...	...	72·3	...	E.	0·8	...	88·1	56·4	99·0	45·1	1·570	5	0·720	25	6·161
Wollongong ...	0	...	...	69·3	...	N.E.	1·4	5·1	78·0	60·5	84·4	49·7	20·230	8	11·000	26	2·426
Moss Vale	31	...	...	65·2	...	W.	0 8	...	73·6	56·7	87·4	44·8	15·710	11	7·860	26	...
Goulburn.....	54	2129	30·011	68·1	83·0	N.E.	0·1	5·2	82·6	53·5	96·7	46·3	7·620	8	2·600	28	4·289
Terrara.....	4	...	...	...	...	.....	...	...	...	...	...	...	22·700	10	12·570	26	...
Wagga Wagga	161	...	...	72·2	...	N.E.	1·1	...	81·5	62·8	102·1	54·9	1·240	4	0·510	25	5·998
Cape St. George	0	175	29·957	69·4	81·0	N.E.	1·5	5·8	76·6	62·2	85·2	52·6	13·230	10	8 250	26	...
Lake George ...	52	2267	30·012	67·6	76·0	N.W.	1·0	5·7	82·7	52·5	99·5	41·0	2·575	9	1·270	26	...
Queanbeyan ...	60	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Urana	218	...	...	75·7	...	S.W.	1·1	2·2	89·3	62·1	104·5	52·1	2·930	7	1·200	25	9·730
Deniliquin	287	410	30·062	73·0	68·0	S.E.	1·3	1·6	89·9	56·1	105·3	41·2	3·830	11	1·890	25	...
Kiandra	88	4640	29·931	53 8	80·0	S.E.	2·0	5·7	68·7	38·9	78·9	30·0	6·180	12	1·470	7	...
Cooma	52	2637	...	66·2	...	N.	2·0	7·6	79·2	53·1	97·6	40·8	7·680	10	2·450	26	2·229
Albury	175	572	30·009	73·1	67·0	N.E.	0·4	3·2	92·0	54·2	100·4	43·3	3·015	9	1·480	8	...
Eden.....	0	107	29·971	69·0	78·0	N.E.	1·3	6·3	75·2	62·7	83·0	54·1	16·530	11	8·350	27	...

ranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Flooded out, 6th to 14th inclusive. Had to remove instruments—rainfall during this period not recorded.
Grafton—Thunderstorms, 10th, 12th. Hazy, 20th.
Bourke—Thunderstorms, 3rd, 8th; and very hot, 15th, 18th, and 28th; low fever and influenza prevalent.
Narrabri—Thunderstorms, 22nd, 28th.
Port Macquarie—Thunderstorms, 9th, 10th, 11th, 21st, 22nd, and 27th; and hail, 11th.
Cassilis—Thunderstorms, 9th, 10th, 21st, 22nd, 23rd, 24th, and violent gale, 28 h.
Muswellbrook—Thunderstorms, 9th, 10th, 11th, 20th, 21st, 22nd, and 28th.
Dubbo—Stormy, 23rd; and heavy thunderstorm, 28th.
Mudgee—Hot, 17th; and heavy rain, 21st.
Dalwood—Heavy storm, with violent wind, 28th.
West Maitland—Thunderstorm, 10th; river up 8 ft., 27th; hot, 17th to 20th.
Lambton—Thunderstorms, 9th, 10th, 11th, and 12th; and lightning during month.
Newcastle—Stormy, 12th and 25th; and foggy, 26th, 27th, and 28th.
Orange—Thunderstorms, 8th, 18th, 19th, 20th, 21st, 22nd, 26th, 27th, and 28th.
Bathurst—Very heavy thunderstorm, 10th; and stormy, 28th.
Kurrajong—Thunderstorms, 9th, 10th, 11th, 20th, 22nd, 23rd, 26th, 27th, and 28th; hail, 20th.
Mount Victoria—Thunderstorms, 7th, 9th, 23rd, 26th, and 28th; and foggy, 10th, 11th, and 16th.
Parramatta—Thunderstorms, 9th, 10th, 20th, and 25th; heavy rain, 23rd, 24th, and 25th.
Sydney—Thunderstorms, 9th, 10th, 20th, 21st, 22nd, 23rd, and 26th; S. squall, 12th; heavy rain, 25th.
Liverpool—Thunderstorms, 9th, 10th, 20th, 21st, 22nd, 26th, 27th, and 28th; heavy flood, 25th; lunar rainbow, 9th.
Wentworth—Thunderstorms, 4th, 6th, 7th, 8th, 16th, 1
25th, and 27th; very hot, 16th; hail, 25th.
Wilton—Thunderstorms, 10th, 11th, 21st, 23rd, and 28th.
Cordeaux River—Thunderstorms, 9th, 10th, 20th, and 2
floods, 23rd.
Young—Thunderstorms, 20th and 24th; and grasshoppe
great numbers, 28th.
Wollongong—Thunderstorms, 25th and 27th.
Moss Vale—Thunderstorms, 8th, 20th, and 28th; severe
20th, and very heavy rain, 25th.
Goulburn—Thunderstorms, 7th, 17th, 19th, 20th, 21st, 2
and 28th.
Terrara—Thunderstorms, 20th and 23rd; flood, 26th, 2
lower than flood, 1870.
Cape St. George—Thunderstorms, 10th, 21st, 23rd, 2
S. gale, 1st; E. gale, heavy rain, and sea, 26th.
Lake George—Thunderstorms, 6th, 7th, 9th, 17th, 22nd,
27th; W. squall, 22nd, and thick fog, 15th.
Urana—Thunderstorms, 7th, 8th, 9th, 20th, 22nd, 24th, 2
and 27th.
Deniliquin—Thunderstorms, 8th, 9th, 17th, 18th, 22nd, 2
24th, 25th, 26th, and 27th. Immense flight of gr
hoppers, lasting 2 hours, darkening sky, making n
like high wind; bottom of flight only 3 feet from grou
on Sunday, the 9th, at 12·30 p m. W. gale, 16th;
gale, 24th; and violent wind squall, 22nd.
Kiandra—Thunderstorms, 6th, 7th, 9th, 17th, 18th, 22nd,
26th; hail, 18th, and frost, 15th and 21st.
Cooma—Thunderstorms, 6th, 7th, 21st and 27th; grea
flood known, 26th; and very hot, 16th and 17th.
Albury—Thunderstorms, 7th, 8th, 9th, 19th, 23rd, 25th, 2
and 27th.
Eden—Thunderstorms, 9th, 21st; creeks flooded and c
covered with lost potatoes, corn, &c., on 27th and 28t

METEOROLOGICAL CURVES

in 8900

1873

FEBRUARY

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Barometer
AT 32°
Scale
1 Div. to 1 [inches]

30·5
30·0
29·5

Wind

Scale of Force
1 Div. to 1 [lbs.]

N.
E.
S.
W.
N.
10

Ozone
Scale
1 Div. to a Degree

0

Temperature
Scale
1 Div. to 2°

70
60

Humidity
Scale
1 Div. to 5 Degrees

100

Rain
Scale
1 Div. to 1 [inches]

0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney.

Force of Wind 25th 31 lbs

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF MARCH, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[Price, 6d.] Su 18—/3

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

MARCH, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading ...	30·133	... On the 17th, at 10 a.m.
	Lowest Reading ...	29·534	... On the 21st, at 6 p.m.
	Mean Height ...	29·874	

(Being 0·027 in. less than that in the same month on an average of the preceding 14 years.)

WIND	Greatest Pressure...	19·2 lbs.	... On the 2nd.
	Mean Pressure ...	0·6 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 14 years E. by N.)

TEMPERATURE	Highest in the Shade ...	81·7	... On the 21st.
	Lowest in the Shade ...	52·7	... On the 30th.
	Greatest Range	20·3	... On the 23rd.
	Highest in the Sun ...	120·0	... On the 10th.
	Highest in Black Box with Glass Top	193·0	... On the 6th.
	Lowest on the Grass ...	46·6	... On the 29th.
	Mean Diurnal Range ...	12·6	
	Mean in the Shade ...	67·9	

(Being 1·1 less than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 27th and 28th.
	Least	47·0	... On the 21st.
	Mean	78·5	

(Being 2·4 greater than that of the same month on an average of the preceding 14 years.)

RAIN	Greatest Fall	0·723 inch.	On the 16th.
	Number of Days	18 rain and 6 dew.	
	Total Fall	1·400 inch.	65 ft. above the ground.
		2·424 inches.	15 inches above the ground.

(Being 3·574 inches less than that of the same month on an average of the preceding 14 years.)

EVAPORATION	Total Amount	4·535 inches.
OZONE	Mean Amount	5·0

(Being 0·2 greater than that in the same month on an average of the preceding 13 years.)

ELECTRICITY ..	Number of Days Lightning	5
CLOUDY SKY ..	Mean Amount	5·9
	Number of Clear Days ...	2
METEORS ..	Number Observed ...	2

REMARKS.

The weather during the month was colder than usual, and frosts occurred at several of the country stations. The rainfall at Sydney was 3½ inches below the average for the month, and less than one inch at fourteen of the country stations—the short supply being principally in the south-western districts. Fifty-six thunderstorms were recorded, and on the 10th thunderstorms occurred at fifteen different stations. An aurora was observed on the evening of the 9th, at Deniliquin.

SYDNEY, MARCH, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.								Humidity. 0–100.	Rain. Inches.
					Dry.	Wet.	Shade.				Sun.	Grass.		
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	Sea Water. 9 a.m.	Mean 9.3.9.	
1	In Equat.	29·793	S.W.	603	69·3	67·2	73·2	67·9	5·3	70·6	106·3	63·4	71·4	87·7	0·388
2		·944	S.W.	519	68·0	64·8	72·1	64·7	7·4	68·4	101·5	60·1	71·6	81·0	0·026
3		30·088	S.S.W.	227	68·0	66·5	73·2	63·6	9·6	68·4	107·7	60·0	71·2	91·0	0·070
4		·119	N.N.E.	116	73·2	70·5	78·5	64·7	13·8	71·6	117·2	58·3	71·4	85·3	0·024
5		·095	N.	221	71·6	68·3	78·3	65·0	13·3	71·7	119·8	57·3	71·6	83·3	0·004
6	First Qr.	29·976	E.N.E.	222	73·3	69·2	79·1	64·6	14·5	71·9	117·7	55·2	71·2	78·7	0·001
7		30·093	N.E.	109	72·5	68·1	78·3	66·9	11·4	72·6	117·1	61·3	71·0	77·7	·0
8	G. N. Dec.	29·969	E.N.E.	217	74·7	71·3	78·6	66·7	11·9	72·7	117·0	59·1	71·4	82·0	0·001
9		·977	S.S.W.	218	70·5	68·6	76·6	68·6	8·0	72·6	110·0	64·1	71·0	89·0	·0
10		·865	W.	189	71·7	69·4	79·8	67·6	12·2	73·7	120·0	61·3	71·2	87·3	0·001
11	Apogee	·818	S.	345	70·9	66·8	77·1	64·1	13·0	70·6	116·0	57·2	71·6	78·0	0·055
12		30·160	W.N.W.	111	64·8	62·0	68·8	61·9	6·9	65·4	97·5	56·8	71·0	84·0	0·082
13		·220	N.E.	103	68·4	63·3	73·9	60·8	13·1	67·4	109·9	54·5	70·6	74·0	0·026
14	Full Moon	·103	N.E.	210	71·1	66·1	76·7	60·3	16·4	68·5	113·8	50·0	70·4	74·0	0·001
15	In Equat.	·022	S.S.E.	101	67·0	65·8	72·0	64·9	7·1	68·5	107·3	56·3	71·0	92·7	0·060
16		·197	S.E.	164	70·3	64·5	74·1	62·6	11·5	68·4	117·0	56·1	71·4	70·0	0·723
17		·302	E.N.E.	142	69·1	64·3	75·1	60·2	14·9	67·7	114·6	53·7	71·2	74·7	0·007
18		·291	N.N.E.	159	68·9	64·7	75·1	60·7	14·4	67·9	114·9	54·1	71·6	77·7	0·023
19		·221	N.E.	236	70·9	66·6	77·2	60·0	17·2	68·6	117·0	51·5	71·2	78·0	0·002
20		·078	N.N.E.	271	73·6	68·8	77·5	64·6	12·9	71·1	115·6	55·7	70·8	75·0	0·001
21		29·844	W.	424	74·1	64·1	81·7	66·3	15·4	74·0	119·1	55·8	71·2	55·0	·0
22	G. S. Dec. Last Qr.	·853	S.	282	65·9	57·9	71·2	57·9	13·3	64·6	112·5	50·7	71·0	60·0	·0
23		30·009	S.S.W.	250	63·5	58·1	76·8	56·5	20·3	66·7	114·2	49·3	71·2	70·0	·0
24		·173	W.	275	64·4	57·8	69·8	57·1	12·7	63·5	107·0	50·2	71·0	65·3	·0
25		·209	N.N.W	131	66·3	61·7	72·6	58·0	14·6	65·3	116·0	52·1	70·6	74·7	0·040
26		29·992	S.	203	64·7	63·1	72·9	59·6	13·3	66·3	106·5	49·7	71·4	90·0	0·001
27	Perigee.	30·086	S.	234	61·4	57·8	64·4	58·2	6·2	61·3	94·1	54·9	71·0	79·7	0·541
28	New Moon	·143	W.	188	61·8	58·9	70·1	54·8	15·3	62·5	113·0	48·4	70·4	83·3	0·174
29	In Equat.	·224	W.	222	60·5	55·3	65·9	52·9	13·0	59·4	104·0	46·6	70·0	70·3	0·170
30		·254	E.N.E.	132	59·3	56·6	68·0	52·7	15·3	60·4	110·2	47·0	69·6	83·0	·0
31		·293	N.	129	63·8	60·6	71·0	54·2	16·8	62·6	113·3	48·1	69·8	81·7	0·003
Means	.....	30·078	W.	6953	68·2	64·2	74·2	61·6	12·6	67·9	111·9	54·8	71·0	78·5	Sum. 2·424

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·037 above the true mean for the day. Heavy dew 5th, 6th, 8th, 14th, 19th and 20th

SYDNEY, MARCH, 1873.

	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	REMARKS.
	0·110	5·5	5·0	5·3	1.—Cloudy, very dull and showery, also strong breeze.
	0·116	...	...	3·3	2.—Cloudy, strong cool breeze all day. Light rain dropping at 8·20 p.m.
	0·078	6·0	5·5	5·8	3.—Fine at 9 p.m. Raining until noon. Light shower, 7·35 p.m. Fresh breeze during day.
	0·172	4·5	0·0	2·3	4.—Cloudy from 9·45 a.m. until after 1 p.m. Dew falling in the evening. Meteor N.E. at 8·57 p.m., from 60° to 54° above horizon.
	0·166	4·0	5·0	4·5	5.—Dense fog until 10 a.m. Fresh breeze from noon. No clouds at 9 p.m. Planet Venus visible at 3 p.m. with naked eye.
	0·210	2·0	6·5	4·3	6.—Fine. Very warm. No clouds at 9 a.m. and calm. Heavy dew falling in the evening. Cloudy at 9·30 p.m. Planet Venus seen at 2·20 p.m.
	0·124	3·5	4·0	3·8	7.—Fine after 1·30 p.m. Very warm. No clouds at 9 p.m. and dew falling.
	0·125	5·0	5·5	5·3	8.—Fine between 1·30 p.m. and 3·30 p.m. Very warm. Light rain at 6·5 p.m. and 7·30 p.m. Venus seen at 3 p.m. with the naked eye.
	0·129	...	...	3·3	9.—Cloudy. Very dull. Light drops of rain between 8 a.m. and 9 a.m., and at intervals during evening. Fresh breeze. Warm.
	0·123	6·0	6·5	6·3	10.—Cloudy. Thunderstorm from 3·21 p.m. until 5·30 p.m. Light rain during storm and at intervals in the evening. Lightning, 5·20 p.m. and 9·21 p.m.
	0·181	7·0	5·5	6·3	11.—Fine after 1 p.m. for a while. Heavy showers during evening from 4·55 p.m. Heavy looking clouds during day. Like thunderstorm, W., at 9 p.m.
	0·033	5·0	5·5	5·3	12.—Cloudy and dull. Shower at 7·20 a.m., raining lightly at 9 a.m., and at intervals during afternoon and evening.
	0·128	6·0	5·0	5·5	13.—Fine between 2·30 p.m. and 7·30 p.m. Forenoon dull. Lunar ring at 9·20 p.m. Dew fell in the evening.
	0·189	5·0	3·0	4·0	14.—Cloudy towards evening, clouds very light. Lunar ring all evening.
	0·077	5·0	7·0	6·0	15.—Cloudy. Thunderstorm, N.E. at 8·26 a.m., and S.W. at 11 a.m. Lightning and showers during storm. Light rain at intervals in afternoon and evening.
	0·139	...	...	3·5	16.—Evening fine. Partial clearing of clouds during day and fresh breeze.
	0·157	5·0	6·5	5·8	17.—Cloudy between 10 a.m. and 11 a.m. At 3 p.m., Venus seen with the naked eye.
	0·112	6·5	4·0	5·3	18.—Fine after 2 p.m. and fresh breeze. No clouds in the evening. Venus visible with the naked eye, 3 p.m.
	0·170	6·5	5·0	5·8	19.—Fine after 8 p.m. Afternoon and evening, fresh breeze. Venus visible with the naked eye at 3 p.m.
	0·211	4·0	5·0	4·5	20.—Cloudy at 9 p.m. and fresh breeze during day. Venus visible at 2 p.m. with naked eye. Dropping rain at 11·37 p.m.
	0·338	4·5	5·0	4·8	21.—Very dry, fresh breeze. Fine after 1 p.m. Lightning between S. and E. all evening. Electrometer 0 to 90 at 9 p.m.
	0·220	4·0	6·5	5·3	22.—Fine until 1·30 p.m., and again between 4·30 p.m. and 8·15 p.m. Fresh breeze all day. Stars very unsteady in the evening.
	0·227	...	...	3·5	23.—Cloudy until noon. Lightning, S. and S.E. all evening. Meteor observed near zenith with a short tail, and lasted 1½ sec.
	0·247	5·5	6·5	6·0	24.—Cloudy at 8·50 p.m. Light shower in the night. Electrometer 0 to 90.
	0·151	6·0	6·5	6·3	25.—Fine from 1·30 p.m. until after 5 p.m. Forenoon dull. Venus visible at 3 p.m. with the naked eye. Light shower at 11·11 a.m.
	.....	4·5	8·0	6·3	26.—Cloudy, dull. Dropping rain at 9·19 a.m., and at 12·12 p.m. Light rain from before 1 p.m. until 8 p.m., except for short intervals.
	0·062	6·5	8·0	7·3	27.—Fine about 8·45 p.m. Forenoon dull, and raining steadily until 11 a.m. Strong breeze at midday. Evening very cool.
	0·129	4·0	7·5	5·8	28.—Fine until about noon. S. squall, 8·25 p.m. Heavy thunderstorm, S., from 8·39 p.m., until 9·5 p.m. Heavy rain at 9 p.m. Lightning all evening, S.E. and S.W. at 6·51 p.m., and N.W. and W. at 9·35 p.m. Electrometer, 0 to 60 at 8·55 p.m.
	0·179	5·0	6·0	5·5	29.—Fine. Very cool. Evening hazy, light dew falling, and almost calm.
	0·109	...	...	3·5	30.—Morning fine until 9·45 a.m. and again in the evening. Clouds light during day.
	0·123	3·5	6·0	4·8	31.—Cloudy from about 9·30 a.m. until after 1 p.m. Drops of rain at 9·33 a.m. Evening very hazy and dew falling.
	Sum. 4·535	5·0	5·6	5·0	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·700	29·767	8 a.m.	29·625	9 a.m.	...	11	13	...	...	...	...	...	...	...	...	...	...	...	...	...	603	25·1	3·2	11·0	S.S.W.	11·35 a.m.
2	29·749	29·777	10 a.m.	29·725	6 p.m.	...	8	16	...	...	...	...	...	...	...	...	...	...	...	...	...	519	21·6	2·3	19·2	S.S.W.	1·52 p.m.
3	29·921	29·953	8 a.m.	29·885	4 a.m.	...	13	4	7	...	...	...	...	...	...	...	...	...	...	...	...	227	9·5	0·5	3·1	S.S.W.	11·50 a.m.
4	29·914	29·967	10 a.m.	29·882	4, 5 p.m., 3, 4 a.m.	...	...	...	1	1	1	...	...	...	12	4	4	1	...	...	...	116	4·8	0·1	0·7	N.E.	4·47 p.m.
5	29·832	29·940	10 a.m.	29·780	4 & 5 a.m.	...	...	...	...	1	2	...	...	7	2	3	6	3	...	...	...	221	9·2	0·4	2·6	E.N.E.	3·30 p.m.
6	29·851	29·911	11 p.m.	29·780	3 p.m.	3	7	...	...	...	...	...	1	...	...	...	8	4	...	...	1	222	9·3	0·4	1·4	E.N.E.	1·17 p.m.
7	29·855	29·923	9 a.m.	29·802	6 a.m.	2	...	...	1	...	...	...	...	...	1	9	3	5	2	...	1	109	4·5	0·1	0·7	E.	5·40 p.m.
8	29·764	29·818	10 a.m.	29·723	4 p.m.	4	2	...	1	3	...	...	1	1	2	2	6	2	...	...	...	217	9·0	0·4	2·0	S.	8·15 a.m.
9	29·714	29·818	9 a.m.	29·689	6 a.m.	6	7	..	2	6	...	...	...	...	...	...	...	...	...	2	1	218	9·1	0·4	3·6	S.S.W.	1·30 p.m.
10	29·591	29·699	9 a.m.	29·556	4 a.m.	...	...	2	3	6	4	...	1	...	...	...	3	4	...	...	1	189	7·9	0·3	1·8	E.N.E.	12·35 p.m.
11	29·769	29·963	8 a.m.	29·643	3 p.m.	12	5	...	1	...	...	...	...	...	...	...	...	...	...	1	5	345	14·4	1·0	3·4	S.E.	8·26 p.m.
12	30·000	30·040	8 a.m.	29·968	4 p.m.	4	...	1	...	6	8	1	...	...	...	...	...	...	...	2	2	111	4·6	0·1	0·3	W.N.W.	10·40 a.m.
13	29·962	30·051	9 a.m.	29·910	5 a.m.	...	...	...	...	1	...	1	...	...	5	10	3	4	...	...	...	103	4·3	0·1	0·7	N.E.	5·40 p.m.
14	29·831	29·938	9 a.m.	29·779	5 a.m.	...	2	...	...	...	...	...	...	1	3	11	7	...	...	...	...	210	8·8	0·4	2·6	E.N.E.	1·30 p.m.
15	29·869	29·933	9 p.m.	29·827	3 p.m.	4	3	2	1	3	...	...	...	...	1	1	...	1	2	1	5	101	4·2	0·1	1·0	E.S.E.	2·45 p.m.
16	30·051	30·121	8 a.m.	30·014	4 p.m.	...	...	4	5	2	...	...	...	...	...	...	...	...	4	9	...	164	6·8	0·2	1·3	E.S.E.	3· 0 p.m.
17	30·081	30·133	10 a.m.	30·053	3, 4 p.m., 3 a.m.	...	...	...	...	2	...	...	8	1	...	4	9	...	...	...	...	142	5·9	0·2	0·7	E.N.E.	4·30 p.m.
18	30·047	30·125	9 a.m.	29·998	4 a.m.	...	...	...	...	...	...	...	1	5	8	7	2	1	...	...	...	159	6·6	0·2	3·1	N.E.	4· 5 p.m.
19	29·946	30·056	9 a.m.	29·891	3 & 4 a.m.	...	...	...	...	...	...	...	...	5	6	12	1	...	...	...	...	236	9·8	0·5	2·6	N.E.	7·45 p.m.
20	29·741	29·916	9 a.m.	29·640	4 a.m.	...	...	...	2	3	...	...	4	2	7	2	4	...	...	...	...	271	11·3	0·6	3·1	N.N.E.	6·30 p.m.
21	29·599	29·682	9 a.m.	29·534	6 p.m.	...	...	...	11	13	...	...	...	...	...	...	...	...	...	...	...	424	17·7	1·6	9·2	W.	1·30 p.m.
22	29·761	29·837	7 a.m.	29·684	9 a.m. & 2 p.m.	9	2	2	6	5	...	...	...	...	...	...	...	...	...	...	...	282	11·8	0·7	3·1	S.W.	10·35 a.m.
23	29·806	29·987	7 a.m.	29·682	4 p.m.	2	6	2	2	5	...	1	4	...	...	...	...	...	...	1	1	250	10·4	0·5	4·2	S.W.	9· 5 p.m.
24	30·004	30·048	10 p.m.	29·960	4 p.m.	7	3	2	4	8	...	...	...	...	...	...	...	...	...	...	...	275	11·5	0·7	2·9	S.	2·45 p.m.
25	29·914	30·040	9 a.m.	29·829	5 a.m.	...	...	...	...	3	...	2	8	...	1	3	5	2	...	...	...	131	5·5	0·2	1·1	E.N.E.	4·50 p.m.
26	29·806	29·873	8 a.m.	29·746	3 p.m.	10	5	4	1	4	...	...	...	...	...	...	...	...	...	...	...	203	8·5	0·4	3·6	S.	9·50 p.m.
27	29·931	29·971	8 p.m.	29·884	1 p.m.	7	1	2	4	5	...	...	...	...	...	...	...	...	...	...	5	234	9·8	0·5	2·6	S.	12·15 p.m.
28	29·943	30·020	8 a.m.	29·866	3 p.m.	2	1	1	2	10	...	...	...	...	...	...	...	2	5	1	...	188	7·8	0·3	3·9	S.	8·35 p.m.
29	30·032	30·070	8 a.m.	29·990	4 p.m.	4	2	...	...	11	...	...	...	...	...	...	...	...	...	...	7	222	9·3	0·4	1·3	S.	12·37 p.m.
30	30·054	30·090	9 p.m.	30·013	3 p.m.	...	...	...	...	4	...	...	...	...	5	4	6	1	3	1	...	132	5·5	0·2	0·6	E.N.E.	5·25 p.m.
31	30·013	30·125	9 a.m.	29·938	4 a.m.	1	...	...	...	...	...	...	...	9	2	2	1	2	5	1	1	129	5·4	0·1	0·5	E.S.E.	4·45 p.m.
Sums or Means.	29·874	Mar. 17th. 30·133	10 a.m.	Mar. 21st. 29·534	6 p.m.	77	78	55	54	102	15	5	28	31	55	74	68	32	21	19	30	Sum 6953	Mean. 9·4	Mean. 0·6			

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of MARCH, 1873.

tations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., March, 1873.						Temperature in Shade.				For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.					Rain.				Evaporation in inches.
						Direction	Force. 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
rgomindah..	640	450	30·096	80·7	42·0	.....	...	...	90·9	70·4	98·7	54·4	2·710	2	1·900	15	9·932
terfield ...	80	...	...	59·6	..	N.E.	2·1	6·3	66·2	53·0	80·3	43·0	0·946	7	0·650	15	3·915
fton	22	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
rke	393	...	...	77·8	...	S.	0·0	0·4	91·5	64·0	102·4	47·9	0·230	1	0·230	15	...
rabri	196	...	...	75·9	...	S.W.	0·9	1·4	88·5	63·3	103·9	50·5	2·640	6	0·830	1	8·595
nidale.....	80	3278	...	61·8	62·0	E.	1·0	4·8	72·4	51·2	80·2	36·1	1·870	8	0·600	11	3·665
t Macquarie	0	...	...	69·5	...	S.W.	1·4	4·7	76·4	62·5	81·0	55·8	7·180	19	1·380	13	8·483
rrurundi ...	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
silis	120	...	...	68·3	...	S.E.	0·3	1·5	79·3	57·2	88·1	40·2	2·140	2	1·340	1	...
swellbrook..	68	...	...	69·7	...	S.E.	2·4	...	81·5	57·9	90·5	44·3	0·600	3	0·440	1	6·766
bbo	182	...	...	70·0	...	N.E.	0·3	...	80·7	59·3	88·9	43·9	1·070	4	0·400	8	5·489
dgee	121	1500	...	67·1	...	E.	0·7	...	77·3	56·9	86·4	43·0	...	...	...	...	...
wood	27	...	...	...	...	.....	...	...	...	...	...	...	2·440	7	0·630	10	...
st Maitland	18	...	...	70·4	...	W.	1·5	5·0	80·6	60·2	87·3	50·4	2·270	10	0·800	3	5·360
nbton	7	...	...	65·1	...	S.	1·2	...	76·9	53·2	84·3	42·0	4·670	7	1·800	2	3·721
wcastle	1	112	30·041	68·8	79·0	N.W.	0·1	3·0	76·2	61·4	82·8	52·3	2·850	13	0·560	2	...
ange.....	124	2891	...	61·2	...	S.E.	0·9	...	71·9	50·5	79·7	36·9	1·550	6	0·670	4	3·241
thurst	96	2200	29·994	62·5	79·0	S.E.	0·8	3·1	78·7	46·3	91·5	32·0	1·010	4	0·360	11	...
rrajong	36	1870	...	59·0	...	E.N.E.	...	...	65·2	52·7	74·0	43·0	2·850	9	1·150	26	...
unt Victoria	61	3490	30·029	60·5	80·0	W.	0·0	4·6	71·3	49·7	81·1	37·9	3·090	9	0·850	*	4·264
odford	50	2192	29·945	62·9	...	W.	0·0	...	67·7	58·1	76·5	48·4	2·990	14	0·900	1	...
rramatta.....	16	...	...	65·0	...	S.	1·0	4·3	79·7	50·3	88·6	37·5	1·070	7	0·480	27	...
lney.....	5	155	30·078	67·9	78·5	W.	0·6	5·9	74·2	61·6	81·7	52·7	2·424	18	0·723	16	4·535
verpool.....	16	...	30·059	66·4	...	S.	0·3	3·9	74·8	58·0	86·0	46·0	2·623	13	1·720	1	...
entworth.....	476	...	...	69·9	...	S.W.	2·3	2·7	82·8	57·0	103·8	43·0	0·280	2	0·240	20	8·582
lton	13	...	...	...	...	.....	...	...	...	...	...	...	0·690	3	0·330	15	...
rdeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	2·550	10	0·790	9	...
ung	140	...	...	67·1	...	S.	0·3	...	82·2	51·9	94·0	35·1	0·290	3	0·110	11	6·642
llongong ...	0	...	...	67·5	...	S.W.	1·6	4·7	76·2	58·7	84·4	49·7	2·240	5	0·600	1	3·276
ss Vale	31	...	...	59·7	...	E.	0·7	...	67·0	52·8	77·4	37·8	3·600	6	1·840	1	...
ulburn.....	54	2129	30·189	64·3	86·0	S.E.	0·1	3·8	79·8	48·8	89·5	34·3	0·950	4	0·730	11	2·900
rrara.....	4	...	...	...	...	.....	...	...	...	...	...	...	4·530	9	1·520†	9	...
gga Wagga	161	...	...	69·3	...	E.	0·9	...	81·2	57·3	94·1	43·9	...	...	...	...	7·145
pe St. George	0	175	30·083	67·0	80·0	S.	1·4	4·5	73·5	60·4	83·2	51·6	1·580	11	0·510	27	...
ke George ...	52	...	30·070	63·4	72·0	N.W.	1·1	4·7	79·5	47·2	88·0	30·3	0·200	9	0·060	29	...
eanbeyan ...	60	...	...	60·3	...	W.	0·3	4·7	67·0	53·6	78·2	40·1	0·560	2	0·420	1	3·710
ana	218	...	...	71·8	...	W.	1·2	...	85·9	57·6	97·5	43·1	...	no	rain.	...	9·216
niliquin	287	410	30·155	67·0	69·0	S.	1·8	1·4	86·0	48·0	98·3	39·2	0·010	1	0·010	17	...
andra	88	4640	30·015	47·7	80·0	N.W.	1·9	5·8	63·2	32·1	73·2	13·3	0·550	6	0·280	21	...
oma	52	2637	...	62·3	...	N.	1·7	6·1	77·9	46·7	88·6	29·8	0·010	4	0·800	1	3·219
bury	175	572	30·022	67·9	68·0	N.E.	0·8	3·0	87·1	48·6	97·9	29·3	0·070	1	0·070	21	...
len.....	0	107	30·021	66·2	75·0	S.W.	1·1	4·8	73·0	59·3	78·0	50·1	0·680	8	0·250	21	...

anged in order of latitude, with distance from the coast, and height above the sea where it is known. Only twelve of the stations have barometers.

* 16th and 27th.

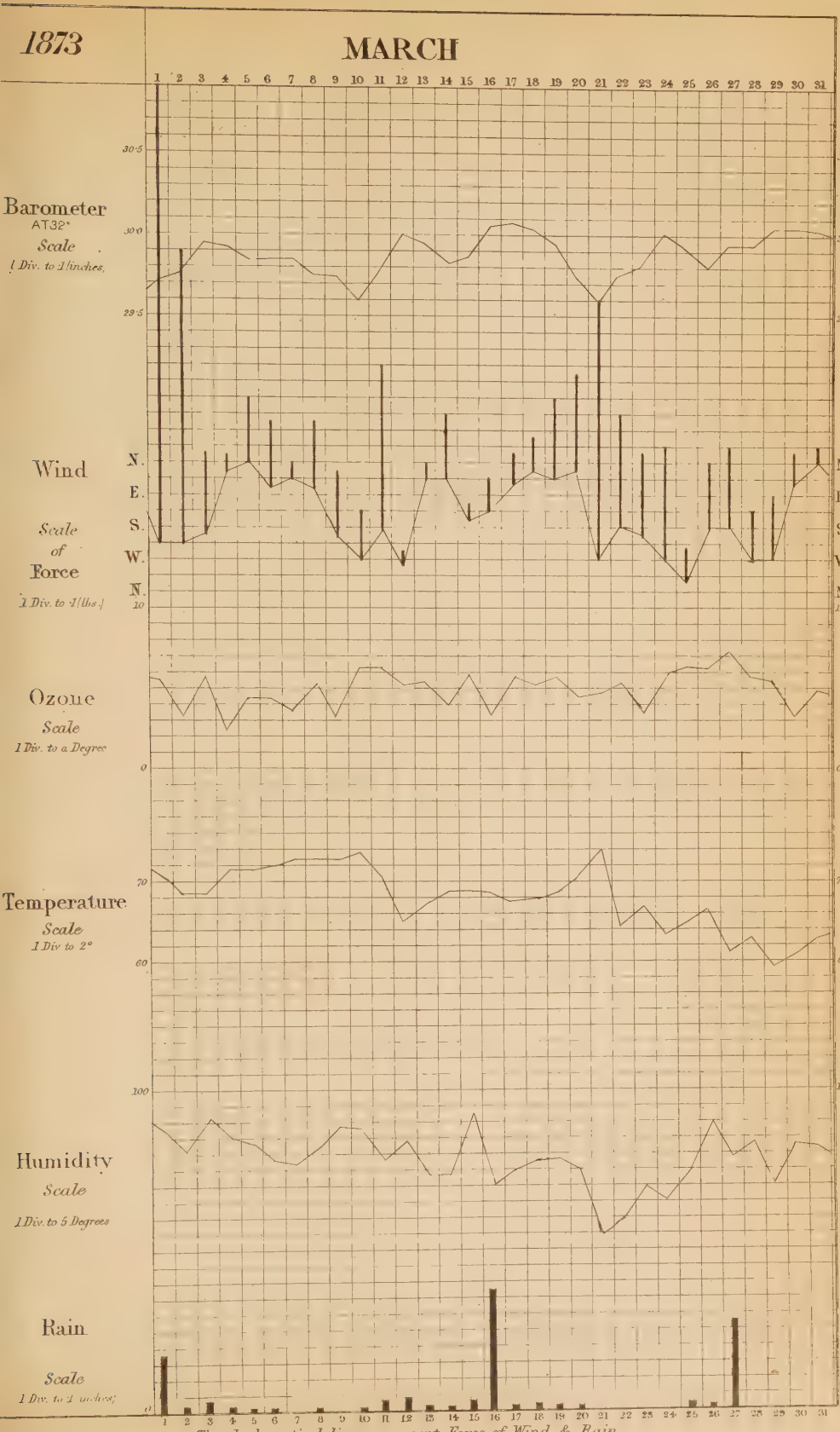
† This rain fell in 27 minutes on the 9th.

REMARKS.

REMARKS.

Bourke—Thunderstorm, 14th; sudden change in temperature on the 21st; nights cold since; rain much wanted.
Port Macquarie—Thunderstorms, 15th, 21st; foggy, 15th; heavy rain, 30th.
Cassilis—Thunderstorms, 1st, 9th, 10th, and 14th; hurricane, 1st, and foggy 3rd and 14th.
Muswellbrook—Thunderstorms, 10th and 15th.
Dubbo—Stormy, 26th.
Mudgee—Dense fog, 11th; storm, 15th; rain (if any) not recorded.
West Maitland—Thunderstorm, 10th; river up 14 feet on 1st, and hot during month.
Lambton—Thunderstorm, 15th; lightning during month.
Orange—Thunderstorms, 8th and 15th; frost, 23rd, 24th, 25th, and 31st.
Bathurst—Foggy, 11th and 19th.
Kurrajong—Thunderstorms, 9th, 10th, and 28th; and foggy, 12th.
Mount Victoria—Thunderstorms, 8th, 10th, 15th, and 26th; foggy, 3rd, 4th, and 12th.
Sydney—Dense fog, 5th; thunderstorms, 10th, 15th, and 28th, and S. squall, 28th.
Liverpool—Thunderstorms, 10th, 15th, and 28th; foggy, 5th and 6th.
Wentworth—Thunderstorms, 18th and 20th.
Cordeaux River—Thunderstorms, 8th, 10th, 15th, and cold, 29th, 30th, and 31st.
Young—Thunderstorm and heavy rain, 10th.
Wollongong—Thunderstorms, 10th and 28th; and h S.E. squall, 10th.
Moss Vale—Misty, 9th; N.W. winds, 21st and 22nd.
Goulburn—Thunderstorms, 1st, 10th, 15th; misty, 14th 28th, and cold, 27th.
Terrara—Thunderstorms, 8th, 10th, 14th, 15th, 20th, and
Wagga Wagga—No rain recorded.
Cape St. George—Thunderstorms, 8th, 10th, 14th, 20th, 28th; squally, 23rd and 24th; S. gale, 2nd.
Lake George—Thunderstorms, 10th and 28th; foggy, and frost, 29th.
Queanbeyan—Very hot, 6th; thunderstorm, 28th, and fr 29th.
Urana—Sultry, 6th; and strong wind, 22nd.
Deniliquin—Aurora, 9th; and cold S. wind, 23rd.
Kiandra—Thunderstorms, 13th, 14th, 15th, and 27th; 21st, and frosty during month.
Cooma—Thunderstorms, 14th, 21st, and 22nd; foggy, and frosty, 29th.
Eden—Thunderstorms, 10th, 14th, 20th, and 23rd; h N.W. gale, 21st.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office, Sydney.

Heavy Dew on the 5th, 6th, 8th, 14th, 19th and 20th — Force of Wind on the 1st 3.2 lbs.

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF APRIL, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[*Price*, 6*d*.] 3*a* 20—13

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 22″ East.

APRIL, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading ...	30·245	... On the 6th, at 9 a.m.
	Lowest Reading ..	29·444	... On the 17th, at 3 p.m.
	Mean Height ...	29·844	

(Being 0·182 in. less than that in the same month on an average of the preceding 14 years.)

WIND	Greatest Pressure...	23·1 lbs.	... On the 30th.
	Mean Pressure ...	0·6 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 14 years W.)

TEMPERATURE	Highest in the Shade ...	75·1	... On the 16th.
	Lowest in the Shade ...	49·7	... On the 29th.
	Greatest Range	16·9	... On the 27th.
	Highest in the Sun ...	113·5	... On the 16th.
	Highest in Black Box with Glass Top	176·0	... On the 1st.
	Lowest on the Grass ...	42·8	... On the 29th.
	Mean Diurnal Range ...	12·2	
	Mean in the Shade ...	63·6	

(Being 1·4 less than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 15th, 19th, 20th, & 22nd.
	Least	47·0	... On the 24th and 28th.
	Mean	79·8	

(Being 2·5 greater than that of the same month on an average of the preceding 14 years.)

RAIN	Greatest Fall	1·070 inch.	On the 15th.
	Number of Days	14 rain and 12 dew.	
	Total Fall	3·042 inches.	65 ft. above the ground.
		3·901 inches.	15 inches above the ground.

(Being 3·758 inches less than that of the same month on an average of the preceding 14 years.)

EVAPORATION	Total Amount	3·182 inches.
OZONE	Mean Amount	5·7

(Being 0·9 greater than that in the same month on an average of the preceding 13 years.)

ELECTRICITY ..	Number of Days Lightning	8
CLOUDY SKY ..	Mean Amount	5·4
	Number of Clear Days ...	4
METEORS ..	Number Observed ...	7

REMARKS.

The weather was mild and pleasant during the month, the mean temperature being 1·4 below, and the rainfall 3·758 inches below the average of the previous 14 years. Foggs in the morning were frequent, and frost at a few of the inland stations. Snow fell at Mt. Victoria and Cooma on the 29th, and at Kiandra on the 24th, 28 h, and 29th. At Lake George ice was seen on the 28th. On the 28th, 29th, and 30th a heavy gale from W.N.W. to S. extended over the colony; it was accompanied by lightning, rain and heavy sea on the coast; at Sydney the max force of wind was 23·1 lbs. on the square foot at 5 p.m. on the 30th. During the latter half of the month there was much easterly sea on the coast, and indications of gales which did not blow home. At Bourke the weather was mild with regular rainfall, and the observer remarks it is the third consecutive year of such weather there, marking a complete change in the seasons.

SYDNEY, APRIL, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.		
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.	
1		30·138	N.	146	65·0	61·3	72·0	55·6	16·4	63·8	113·0	50·3	69·4	79·0	0·003
2		·058	S.	312	65·4	59·7	70·0	57·2	12·8	63·6	107·1	50·1	69·0	69·7	0·001
3		·303	W.	115	60·6	58·3	64·1	57·7	6·4	60·9	98·9	53·1	62·2	85·7	0·097
4	G. N. Dec.	·342	E.N.E.	125	64·4	59·8	69·0	58·1	10·9	63·6	104 2	52·1	69·0	74·3	0·001
5	First Qr.	·407	W.N.W.	120	65·2	61·9	71·1	55·4	15·7	63·3	115·0	49·1	69 4	81·3	0·002
6		·414	W.N.W.	161	59·3	59·0	72·5	56·0	16·5	64·3	111·6	50·4	69·0	98·0	0·004
7		·350	E.N.E.	141	66·2	62·2	71·6	55·2	16·4	63·4	111·4	49·9	69·2	78·0	0·002
8	Apogee	·309	E.N.E.	123	66·2	63·1	73·6	56·8	16·8	65·2	113·0	51·6	69·0	82·7	0·002
9		·169		88	66·2	63·7	72·9	58·5	14·4	65·7	113·1	52·6	69·4	85·7	0·002
10		·032	S.S.W.	189	66·5	63·4	73·1	58·6	14·5	65·9	110·5	53·8	69·0	82·3	0·004
11		29·875	S.E.	314	65·2	64·5	69·7	61·6	8·1	65·7	84·6	57·0	69·2	95·0	0·115
12	In Equat.	·942	E.S.E.	159	66·6	64·0	72·1	63·2	8·9	67·7	109·9	59·1	69·0	85·0	0·864
13	Full Moon	30·127	E.S.E.	298	68·6	62·6	71·3	62·2	9·1	66·8	110·1	57·1	68·8	69·0	0·099
14		·117	E.	210	66·4	62·1	69·1	61·9	7·2	65·5	99·7	56·8	68·6	76·0	0·089
15		29·855		68	64·8	63 9	70·1	61·5	8·6	65·8	108·9	57·0	68·8	95·0	1·070
16		·740	W.N.W.	252	68·2	61·8	75·1	58·6	16·5	66·9	113·5	51·8	69·0	67·0	0·014
17		·708	W.N.W.	234	66·2	58·8	74·1	62·0	12·1	68·1	112·9	56·0	68·6	62·7	·0
18		·724	W.	258	62·3	59·9	67·7	59·3	8·4	63·5	100·6	52·7	68·8	84·7	0·024
19	G. S. Dec.	·843	W.	216	62·5	61·5	66·1	59·0	7·1	62·6	86·0	53·1	68·6	93·7	0·235
20	Last Qr.	·945	W.	164	63·3	63·3	70·5	59·6	10·9	65·1	95·4	54·1	69·0	100·0	0·398
21		·983	N.E.	78	65·8	64·0	71·8	61·1	10·7	66·5	113·4	56·5	69·2	88·7	0·402
22		·868	W.	199	62·9	62·6	71·2	60·6	10·6	65·9	95·7	54·7	68·8	97·7	0·003
23		·937	W.	296	64·5	58·3	72·1	57·7	14·4	64·9	112·7	51·0	68·6	66·7	0·141
24	Perigee.	30·047	W.	369	61·7	53·4	67·6	56·2	11·4	61·9	106·1	46·4	68·8	57·0	·0
25	In Equat.	·232	W.	172	58·8	54·1	65·1	51·8	13·3	58·5	105·0	44·1	68·4	72·7	·0
26		·242	W.	160	58·4	56·3	67·5	51·7	15·8	59·6	103·5	45 2	68·0	85·7	0·001
27	New Moon	·104	W.	143	57·0	55·0	68·9	52·0	16·9	60·5	107·7	45·8	68·2	86·0	0·003
28		29·846	W.	456	61·3	52·4	70·1	57·3	12·8	63·7	108·3	49·1	68·0	54·3	0·001
29		·774	W. S. W	579	55·0	50·2	59·1	49·7	9·4	54·4	90·9	42·8	68·0	70·3	·0
30		·938	S.S.W.	718	58·8	53·8	61·8	50·3	11·5	56·1	89·0	47·0	68·2	70·7	0·324
Means	.....	30·046	W.	6863	63·4	59·8	69·7	57·5	12·2	63·6	105·1	51·7	68·8	79·8	Sum. 3·901

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·033 above the true mean for the day. Heavy dew 1st, 2nd, 5th, 6th, 7th, 8th, 9th, 22nd, 26th, 27th, and 28th.

SYDNEY, APRIL, 1873.

E.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	REMARKS.
1	0·157	4·0	5·0	4·5	1.—Fine. Evening hazy, light dew falling. Meteor observed S., at 8·45 p.m., altitude 40°, color bright, and lasted 12 seconds, leaving train of sparks.
2	0·191	5·0	6·0	5·5	2.—Cloudy, towards evening turned fine, and then cloudy again after 6·30 p.m.
3	0·053	5·5	6·0	5·8	3.—Cloudy and dull. Raining from 8·30 a.m. until after 9 a.m. Very light rain at 1 p.m., and again at 2·5 p.m.
4	0·108	4·0	6·5	5·3	4.—Cloudy from 10·30 a.m. until after 2·30 p.m. One meteor observed N.W. at 9·39 p.m., and four S.E. at 10·7 p.m. and 10·9 p.m.
5	0·144	5·5	5·5	5·5	5.—Fine. Fresh breeze in the forenoon. Planet Venus visible at 3 p.m. with the naked eye. No clouds in the evening and dew falling.
6	0·160	...	...	3·3	6.—Dense fog all morning until 10·30 a.m., rest of day fine. Dew fell in the night.
7	0·160	6·5	4·5	5·5	7.—Fine. Fresh breeze in forenoon and very dry.
8	0·146	6·0	5·0	5·5	8.—Fine. Morning foggy. Planet Venus visible at 3 p.m. with the naked eye. Heavy dew fell in the evening.
9	0·106	5·5	5·0	5·3	9.—Fine in the evening from 7·30 p.m. Morning foggy. Evening calm and heavy dew falling.
10	0·077	5·5	7·0	6·3	10.—Cloudy and fine alternately. Dew falling in the evening.
11	.....	...	...	4·0	11.—Cloudy and raining all day, rain very light at times.
12	0·051	6·5	8·0	7·3	12.—Fine between 10 p.m. and 10·30 p.m. Showers at intervals, from 12·20 p.m. until evening.
13	0·125	...	...	4·0	13.—Cloudy. Fresh breeze. Afternoon and evening showery from 1·12 p.m.
14	0·028	9·0	9·0	9·0	14.—Cloudy and very dull. Forenoon showery.
15	0·056	5·0	3·0	4·0	15.—Morning foggy. Steady rain from 2·10 a.m. until 9·20 a.m. Clouds cleared at 7 p.m., after which, cloudy & fine alternately. Lightning, S.W, S., & S.E., at 6·28 p.m.
16	0·164	6·0	5·5	5·8	16.—Fine, warm, with fresh breeze.
17	0·164	3·5	6·5	5·0	17.—Fine until after 1 p.m., and again between 7 p.m. and 8·30 p.m. Like thunderstorm, S.W., at 3 p.m. Lightning, S. & E.N.E. all evening, from 6·23 p.m.
18	0·017	6·0	7·0	6·5	18.—Cloudy. Forenoon showery. Dropping rain again at 5 p.m. and partial rainbow E. Electrometer, 0 to 90 at 12·10 p.m. Lightning, N.N.E. during evening, and S. after 9 p.m.
19	0·	7·5	8·0	7·8	19.—Cloudy and showery; partial clearing of clouds after each shower. Lightning, E. and N.E. during evening.
20	0·018	...	...	4·3	20.—Evening fine, turning cloudy again at 9 p.m. Forenoon showery.
21	0·061	8·0	5·0	6·5	21.—Cloudy and fine alternately. Heavy dew fell in the evening.
22	0·051	5·0	7·0	6·0	22.—Fine after 5 p.m. Dense fog all morning. Light thunderstorm from W. from 1·50 p.m. until 3·10 p.m. Lightning between E. and S. during evening. Heavy shower at 3 p.m. Bright meteor, 7·57 p.m., falling S.E. from Southern Cross.
23	0·158	5·5	7·0	6·3	23.—Cloudy between 1 p.m. and 2 p.m. Fresh cool breeze all day. No clouds in the evening.
24	0·180	6·0	7·0	6·5	24.—Fine. Strong dry breeze during day. No clouds during afternoon and evening. Lightning, S.S.E., all evening.
25	0·103	5·0	7·0	6·0	25.—Fine. Cool dry breeze. Electrometer, 0 to 90 after 3 p.m. Heavy dew fell in the evening.
26	0·109	6·0	6·5	6·3	26.—Fine. Evening hazy, and dew falling.
27	0·081	...	...	4·0	27.—Afternoon and evening cloudy. Clouds were light during evening.
28	0·246	6·5	7·5	7·0	28.—Fine. Strong dry breeze in the afternoon. Lightning, S.E., all morning, until nearly daylight. also N.E. and E. during evening, and S.S.E. after 9 p.m. Electrometer, 0 to 65 during afternoon, and 0 to 75 at 9 p.m.
29	0·104	6·5	8·0	7·3	29.—Fine towards evening, until 8·30 p.m. Stormy during day, and raining at intervals during forenoon. Lightning between E.N.E. and S.S.E. during evening.
30	0·164	6·0	7·0	6·5	30.—Cloudy, dull, and stormy, also cold. Light rain about noon.
	Sum				
eans	3·182	5·8	6·4	5·7	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																			
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·857	29·968	9 a.m.	29·809	4 a.m.	...	1	...	1	3	...	...	...	8	...	4	6	1	...	...	...	146	6·1	0·2	1·0	E.N.E.	3· 0 p.m.
2	29·970	30·101	8 a.m.	29·823	5 p.m.	8	6	2	...	1	...	...	...	...	...	...	...	...	...	...	7	312	13·0	0·9	2·0	S.S.E.	4·25 p.m.
3	30·113	30·159	8 a.m.	30·082	3 p.m.	3	2	1	5	7	1	...	...	...	...	...	...	...	1	3	1	115	4·8	0·1	1·3	S.	1·45 p.m.
4	30·152	30·211	8 a.m.	30·101	4 p.m.	...	...	...	...	4	7	...	...	1	1	4	7	...	...	...	...	125	5·2	0·1	0·7	E.N.E.	4·15 p.m.
5	30·200	30·240	9 a.m.	30·167	2 & 3 p.m.	...	...	...	...	4	7	1	...	1	3	5	3	...	...	...	...	120	5·0	0·1	1·3	N.E.	4·15 p.m.
6	30·171	30·245	9 a.m.	30·136	3 & 4 a.m.	...	...	...	...	5	8	...	...	...	4	5	2	...	...	...	...	161	6·7	0·2	1·1	N.E.	4·15 p.m.
7	30·120	30·185	9 a.m.	30·086	3 & 4 a.m.	...	...	...	...	2	...	9	...	...	1	3	9	...	...	...	...	141	5·9	0 2	1·1	E.N.E.	1·50 p.m.
8	30·038	30·140	9 a.m.	29·996	3, 4, 5, & 6 a.m.	...	...	...	...	2	5	2	1	2	1	1	10	...	...	...	...	123	5·1	0·1	1·4	E.N.E.	1·35 p.m.
9	29·897	30·004	9 a.m.	29 831	5 a.m.	...	...	...	...	2	...	...	...	...	7	2	...	...	...	...	1	88	3·7	0·1	0·4		12·30 p.m.
10	29·781	29·872	10 a.m.	29·695	5 & 6 a.m.	6	7	1	2	3	...	...	...	1	1	...	...	...	...	1	2	189	7·9	0·3	3·4	S.S.E.	7·50 a.m.
11	29·705	29·769	8 a.m.	29·609	3 a.m.	2	...	...	...	...	...	...	...	...	...	...	...	...	14	8	314	13·1	0·9	2·6	S.E.	11·45 a.m.	
12	29·843	29·943	8 a.m.	29·776	9 a.m.	...	...	2	4	2	...	...	...	...	...	2	1	2	5	4	2	159	6·6	0·2	2·0	E.S.E.	12·10 p.m.
13	29·954	29·985	9 p.m.	29·929	3, 4, & 6 a.m.	...	...	...	...	...	...	...	...	1	...	...	...	1	10	8	4	298	12·4	0·8	2·9	S.E.	5·50 p.m.
14	29·811	29·949	9 a.m.	29·694	7 a.m.	...	...	1	...	1	4	...	...	...	1	1	1	12	1	2	...	210	8·8	0·4	3·1	N.E.	12·40 a.m.
15	29·594	29·690	10 a.m.	29·552	4 a.m.	...	...	1	7	3	3	1	1	...	...	...	...	...	1	...	...	68	2·8	0·0	0·4		2·15 p.m.
16	29·537	29·604	9 a.m.	29·499	4 p.m.	...	...	...	...	...	13	9	2	...	...	...	...	...	...	...	...	252	10·5	0·6	1·3	W.	11·25 a.m.
17	29·502	29·545	10 a.m.	29·444	3 p.m.	...	...	2	1	8	13	...	...	...	...	...	...	...	...	...	...	234	9 8	0·5	6·1	W.	3·12 p.m.
18	29·578	29 641	8 a.m.	29·528	5 p.m.	5	...	3	5	10	...	...	...	...	...	...	...	...	...	...	1	258	10·8	0·6	2·0	W.	1·55 p.m.
19	29·688	29·758	8 a.m.	29·638	2 p.m.	...	8	3	2	11	...	...	...	...	...	...	...	...	...	...	...	216	9 0	0·4	3·6	S.S.W.	1·30 p.m.
20	29·769	29·808	8 a.m.	29·745	2 p.m.	3	2	...	4	8	...	...	...	...	...	...	...	...	1	3	3	164	6·8	0·2	1·3	S.S.E.	1·35 p.m.
21	29·747	29·813	8 a.m.	29·695	5 a.m.	...	...	...	...	1	2	...	...	...	3	11	5	...	...	...	2	78	3·3	0·1	0·3	E.N.E.	6·45 p.m.
22	29·661	29·700	9 a.m.	29·629	1 & 2 p.m.	...	1	1	5	8	2	1	...	4	2	...	...	...	...	...	...	199	8·3	0·3	3·4	W.	2· 0 a.m.
23	29·774	29·850	8 a.m.	29·707	3 p.m.	...	...	...	7	17	...	...	...	...	...	...	...	...	...	...	...	296	12·3	0·8	3·1	W.	11·15 a.m.
24	29·924	30·052	8 a.m.	29·829	2 p.m.	...	...	...	8	16	...	...	...	...	...	...	...	...	...	...	...	369	15·4	1·2	4·5	W.S.W.	10·40 a.m.
25	30·032	30·061	9 & 10 a.m.	29·997	3 & 4 p.m.	5	2	2	2	12	1	...	...	...	...	...	...	...	...	...	...	172	7·2	0·3	1·1	W.	9·40 a.m.
26	29·993	30·069	9 a.m.	29·945	7 a.m.	7	...	3	1	13	...	...	...	...	...	...	...	...	...	...	...	160	6·7	0·2	1·1	S.	1·45 p.m.
27	29·774	29·938	9 a.m.	29·688	5 a.m.	2	...	...	2	9	2	2	...	...	...	...	...	...	...	...	7	143	6·0	0·2	1·1	W.N.W.	6·30 a.m.
28	29·631	29·705	9 p.m.	29·583	3 & 6 a.m.	...	...	2	2	10	7	2	1	...	...	...	...	...	...	...	...	456	19·0	1·8	14·6	W.N.W.	1·25 p.m.
29	29·702	29·743	8 a.m.	29·602	9 a.m.	...	1	6	10	7	...	...	...	...	...	...	...	...	...	...	...	579	24·2	2·9	14·6	S.W	6·25 a.m.
30	29·816	29·898	8 a.m.	29·743	3 p.m.	...	21	2	1	...	...	...	...	...	...	...	...	...	...	...	...	718	29 9	4·5	23·1	S.S.W.	4·53 p.m.
Sums or Means.	29·844	April 6th. 30·245	9 a.m.	April 17th. 29·444	3 p.m.	41	51	32	69	169	75	27	5	18	24	38	44	16	19	35	38	Sum 6863	Mean. 9·5	Mean. 0·6			

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of APRIL, 1873.

ations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., April, 1873.										For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.	Temperature in Shade.				Rain.				Evaporation in inches.
						Direction	Force. 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
gomindah..	640	450	30·057	69·3	57·0	.....	...	...	79·5	59·1	86·8	45·2	1·000	2	0·920	14	5·505
erfield ...	80	...	...	...	..	.....	...	...	...	...	...	...	...	...	...	...	...
on	22	...	...	65·4	...	N.E.	0·4	3·8	80·9	49·8	92·7	43·2	1·988	8	0·420	8	2·765
ke	393	...	...	65·3	...	S.	0·0	0·9	76·1	54·4	84·4	43·4	1·960	2	1·500	15	...
abri	106	...	...	68·0	...	S.W.	0·9	1·3	80·4	55·6	88·9	40·5	0·250	4	0·160	15	5·531
dale.....	80	3278	...	55·4	...	E.	1·2	6·4	65·0	45·8	73·2	30·1	1·330	10	0·300	2	1·951
Macquarie	0	...	...	65·0	...	S.W.	1·6	3·9	73·2	56·8	76·3	47·0	7·545	20	3·420	12	3·288
urundi ...	94	1545	...	59·4	...	W.	0·7	5·1	69·1	49 6	74·6	38·8	No	rain	recor	ded.	...
lis	120	...	...	60·1	...	E.	0·3	1·5	72·5	47 6	80·1	30·2	0·620	3	0·310	23	2·139
wellbrook..	68	...	...	62·2	...	W.	2·2	...	73·8	50·5	79·5	38·3	1·820	6	0·550	19	2·126
o	182	...	...	61·4	...	E.	0·7	...	71·0	51·7	78·9	37·9	0·840	3	0·350	16	3·464
gee	121	...	...	59·4	...	W.	1·2	...	69·4	49·3	75·7	37·0	1·010	3	0·510	15	...
ood	27	...	...	...	...	.....	...	...	...	...	...	...	2·860	6	0·900	23	...
Maitland	18	...	...	...	...	W.	1·6	4·2	...	54·4	...	45·1	3·670	9	1·500	12	2·721
oton	7	...	...	58·7	...	W.	1·2	...	69·5	47·9	75·3	37·0	8·070	11	3·620	12	2·232
castle	1	112	30·014	64·5	76·0	S.W.	0·3	3·7	71·6	57·3	77·3	48·3	7·570	13	3·090	12	...
ge.....	124	2891	...	54·1	...	S.	1·7	...	62·5	45·7	67·9	35·5	3·010	11	0·720	16	1·388
urst	96	2200	30·012	54·1	82·0	W.	1·4	5·2	69·6	38·6	79·5	22·0	1·370	5	0·600	15	...
ajong	36	1870	...	54·2	...	E.S.E.	...	...	60·2	48·2	64·0	39·0	4·150	12	1·350	11	...
nt Victoria	61	3490	30·002	53·6	86·0	W.	0·0	5·2	62·2	44·9	69·6	32·9	4·280	11	1·050	15	3·486
dford	50	2192	29·933	57·6	...	W.	1·5	...	62·0	53·1	65·5	41·4	5·630	14	1·400	12	...
amatta.....	16	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
ey.....	5	155	30·046	63·6	79·8	W.	0·6	5·4	69·7	57·5	75·1	49·7	3·901	16	1·070	15	3·182
rpool.....	16	...	30·023	60·5	...	W.	0·6	4·1	69·4	51·5	73·0	43·0	2·812	11	0·880	12	...
tworth.....	476	...	...	63·5	...	S.	1·4	4·1	72·9	54·0	86·3	43·0	1·700	9	0·570	15	3·823
on	13	...	...	...	...	.....	...	...	...	...	...	...	4·570	11	1·310	11	...
leaux River	6	...	...	...	...	.....	...	...	...	...	...	...	9·280	16	1·850	12	...
g	140	...	...	58 8	...	E.	0·9	0·7	72·0	45·5	87·0	30·1	3·180	7	0·760	23	5·079
ongong ...	0	...	...	63·8	...	S.W.	2·0	4·5	71·8	55·8	76·4	44·7	4·090	7	1·350	12	3·331
, Vale	31	...	...	54·7	...	W.	0·9	...	61·1	48·3	66·4	34·8	5·250	11	1·000	30	...
burn.....	54	2129	30·053	57·4	...	W.	0·0	6·8	70·5	44·3	79·5	33·1	2·230	10	0·500	15	2·891
a	4	...	...	...	...	.....	...	...	...	...	...	...	9·250	14	2·120	15	...
ga Wagga	161	...	...	59·3	...	N.E.	0·9	...	68·3	50·3	81·1	40·9	2·670	6	0·920	18	3·418
St. George	0	175	30·014	62·7	78·0	W.	1·5	5·6	68·5	56·8	73·2	45·6	14·650	16	4·760	12	...
George ...	52	2267	30·081	56·0	83·0	W.	2·2	5·3	69·5	42·5	80·5	30·0	2·080	14	0·730	15	...
nbeyan ...	60	...	...	51·8	...	W.S.W.	0·5	4·5	56·7	46·8	64·2	35·1	1·090	4	0·580	15	2·420
a	218	...	...	64·9	...	S.W.	1·3	...	77·9	51·9	88·5	45·1	2·060	6	0·670	22	4·856
liquin	287	410	30·154	61·2	79·0	S.W.	1·3	3·1	76·1	46·3	91·3	35·2	2·380	6	0·850	17	...
dra	88	4640	30·005	42·8	84·0	S.E.	2·0	7·4	56·3	29·3	70·2	16·3	4·960	15	1·050	17	...
ia	52	2637	...	54·9	...	S.	1·9	7·2	68·5	41·3	79·6	29·8	2·530	9	0·630	29	...
ry.....	175	572	29·955	60·2	76·0	W.	0·4	4·2	76·0	45·4	88·4	29·3	3·780	9	0·720	22	...
.....	0	107	30·022	63·4	80·0	S.W.	1·7	5·0	69·5	57·2	74·0	48·1	8·890	13	4·780	16	...

nged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 17 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Thunderstorm, 18th; cool, 26th, 27th, 28th, 29th and 30th.
Bourke—Heavy rainfall, 15th; feed and water abundant.
Narrabri—Foggy, 23rd and 27th.
Port Macquarie—Squally, 29th and 30th.
Murrurundi—Foggy, 5th, 9th, and 10th.
Muswellbrook—Thunderstorm, 19th.
Mudgee—Cold, 25th, 26th, and 27th.
West Maitland—Stormy, 14th; cold, 26th and 29th.
Lambton—Thunder and lightning, 18th, 19th, and 20th, and lightning, 28th, 29th, and 30th.
Newcastle—Stormy, 12th and 30th; heavy sea, 12th and 30th, and foggy, 21st and 22nd.
Orange—Frost, 26th and 27th.
Bathurst—Foggy, 10th.
Kurrajong—Squally, 11th and 12th; thunderstorms, 19th, 20th, and 22nd.
Mount Victoria—Stormy, 16th, 17th, 22nd, 29th, and 30th; snow, 29th, and foggy, 3rd, 11th, 12th, 19th, and 20th.
Woodford—Thunderstorms, 19th and 22nd.
Sydney—Dense fogs, 6th and 22nd; foggy, 15th; thunderstorms, 17th and 22nd, and stormy, 29th and 30th.
Liverpool—Thunderstorms, 14th, 18th, and 22nd; frosty, 25th, and foggy during month.
Wentworth—Heavy thunderstorm, 14th.
Wilton—Thundertorms, 15th and 22nd.
Cordeaux River—Thunderstorms, 11th, 15th, and 17th; cold end of, and foggy during month.
Young—Cold and squally, 29th.
Moss Vale—Sleet, 29th; very foggy, 10th, and squally, 3
Goulburn—Foggy, 5th, 8th, 9th, and 10th.
Terara—Thunderstorm, 18th.
Wagga Wagga—Foggy, 19th, 20th, 25th, and 26th.
Cape St. George—Squally, 11th and 20th; thunderst 19th, 20th, and 30th; heavy gale and sea, 15th; E s 14th, and E gale, 16th.
Lake George—Thunderstorms, 15th; ice, 28th; frosty foggy during month.
Queanbeyan—Sharp frost, 25th and 26th; gale, 29th.
Urana—Squally, 16th.
Deniliquin—Strong S.W. gale, 27th and 28th, and heavy 21st.
Kiandra—Sleet and snow, 24th, 28th, and 29th; stormy, and frosty during month.
Cooma—Snow, 29th; stormy, 29th, and frosty and f during month.
Albury—Thunderstorm, 13th, and foggy, 27th.
Eden—Heavy sea, 15th, and thunder squall, 17th.

METEOROLOGICAL CURVES

1873

APRIL

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Barometer
AT 32°
Scale
Div. to 1 [inches]

30·5
30·0
29·5

Wind
Scale of Force
1 Div. to 1 [lbs.]

N.
E.
S.
W.
N.
10

Ozone
Scale
Div. to a Degree

0

Temperature
Scale
1 Div. to 2°

70
60

Humidity
Scale
Div. to 5 Degrees

100

Rain
Scale
Div. to 1 [inches]

0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney.

e of Wind on 29th 2.9 lbs & on 30th 4.5 lbs ~ Heavy dew 1st 2nd 5th 6th 7th 8th 9th 10th 22nd 26th 27th 28th

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF MAY, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[*Price, 6d.*] 3u 21—18

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

MAY, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	30·239	... On the 29th, at 9 a.m.
	Lowest Reading	29·507	... On the 4th, at 3 a.m.
	Mean Height	29·946	

(Being 0·004 in. greater than that in the same month on an average of the preceding 14 years.)

WIND	Greatest Pressure... ...	5·4 lbs.	... On the 6th.
	Mean Pressure	0·3 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 14 years W.)

TEMPERATURE	Highest in the Shade ...	78·3	... On the 16th.
	Lowest in the Shade ...	46·5	... On the 18th.
	Greatest Range	24·3	... On the 14th.
	Highest in the Sun ...	112·1	... On the 8th.
	Highest in Black Box with Glass Top	150·5	... On the 3rd.
	Lowest on the Grass ...	39·1	... On the 18th.
	Mean Diurnal Range ...	14·2	
	Mean in the Shade ...	60·2	

(Being 1·9 greater than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 23rd and 28th.
	Least	45·0	... On the 16th.
	Mean	78·6	

(Being 3·4 greater than that of the same month on an average of the preceding 14 years.)

RAIN	Greatest Fall	0·535 inch.	On the 28th.
	Number of Days	11 rain and 12 dew.	
	Total Fall	0·665 inch.	65 ft. above the ground.
		1·025 inch.	15 inches above the ground.

(Being 3·025 inches less than that of the same month on an average of the preceding 14 years.)

EVAPORATION	Total Amount	2·042 inches.
OZONE	Mean Amount	5·7

(Being 1·3 greater than that in the same month on an average of the preceding 13 years.)

ELECTRICITY ..	Number of Days Lightning	2
CLOUDY SKY ..	Mean Amount	6·4
	Number of Clear Days ...	1
METEORS ..	Number Observed ...	1

REMARKS.

The Barometer was remarkly steady throughout the month with prevailing light westerly winds and a small rainfall, the total fall being less than one inch at 23 Stations, and less than half-an-inch at 12 of them. Several lunar halos were observed during the early part of the month; and on the 12th a total eclipse of the Moon took place, only the southern half of the Moon was red, the northern half being of the usual color but giving very little light. On the 19th, an Earthquake was felt at Mudgee, Mount Victoria, Woodford, and South Head, Sydney Harbour, where the Lighthouse-keeper reports that he felt three distinct shocks which lasted about 30 seconds at 6·19 p.m.; Mount Victoria gives the time at 6·45 p.m. On the 16th, at Sydney, the wind was hot and dry until evening.

SYDNEY, MAY, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.	Ca S 0- Ta at &
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water. 9 a.m.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.		Mean 9.3.9.		
1		30·095	W.	298	57·4	53·9	60·2	55·0	5·2	57·6	84·0	48·1	67·8	78·0	·0	6
2	G. N. Dec.	·105	W.	113	57·5	54·0	66·5	48·5	18·0	57·5	104·1	42·3	67·6	78·7	0·002	7
3		29·940	W.N.W.	89	58·4	53·5	68·0	49·5	18·5	58·8	106·0	39·6	67·2	73·0	0·001	4
4	First Qr.	·867	N.W.	140	52·6	50·4	69·9	50·6	19·3	60·3	108·0	41·1	67·4	85·0	0·001	10
5		·717	W.	357	63·5	55·0	70·4	52·4	18·0	61·4	106·5	42·6	67·0	56·7	·0	2
6	Apogee.	·882	W.	217	62·0	54·7	66·1	57·0	9·1	61·6	100·0	46·4	67·2	61·0	·0	7
7		30·021	N.N.W.	203	67·7	57·5	74·2	56·9	17·3	65·6	109·0	45·8	67·0	52·3	·0	9
8		·092	N.	320	67·5	58·0	75·7	58·9	16·8	67·3	112·1	46·1	66·8	54·3	·0	7
9	In Equat.	·112	N.	183	67·6	58·3	75·1	60·9	14·2	68·0	108·0	47·5	66·0	56·0	·0	10
10		·248	S.	159	62·3	59·0	69·8	58·3	11·5	64·1	97·0	50·4	65·4	81·0	·0	7
11		·324	N.W.	138	58·0	56·3	68·3	55·3	13·0	61·8	100·6	48·6	65·0	88·0	0·003	5
12	Full Moon	·204	W.	80	60·2	57·0	70·3	53·2	17·1	61·8	108·0	46·1	65·2	80·3	0·002	6
13		·157	W.	108	61·3	56·4	72·0	51·8	20·2	61·9	107·6	43·9	64·6	74·3	0·001	3
14		·208	W.	152	62·0	57·1	73·3	49·0	24·3	61·2	109·0	40·1	64·8	75·7	0·003	2
15		·306	N.N.E.	146	63·0	60·7	69·3	53·6	15·7	61·5	105·0	47·3	64·6	86·3	0·001	0
16	G. S. Dec.	·062	W.	345	69·9	59·5	78·3	54·4	23·9	66·4	107·2	42·1	64·2	52·3	0·002	9
17		·261	W.	132	56·0	50·5	64·1	49·8	14·3	57·0	102·0	41·1	64·4	69·0	·0	0
18		·275	W.	127	50·4	46·7	63·8	46·5	17·3	55·2	102·6	39·1	64·0	75·0	0·001	0
19	Last Qr.	·216	W.	133	56·9	54·1	64·1	50·0	14·1	57·1	98·9	43·1	64·4	81·7	0·001	8
20	Perigee.	·294	W.	95	54·8	54·2	59 8	51·6	8·2	55·7	83·3	45·9	64·0	95·7	0·046	6
21		·261	N.	146	58·4	56·0	64·4	50·7	13·7	57·6	101·2	44·8	64·2	84·3	0·077	7
22	In Equat.	·160	W.	99	57·2	55·5	63·9	50·2	13·7	57·1	94·1	43·1	64·0	89·3	0·003	7
23		·305	W.	129	57·7	57·4	61·7	52·9	8·8	57·3	71·0	45·4	64·4	98·0	0·080	10
24		·271	W.	100	61·3	59·6	67·7	54·3	13·4	61·0	104·0	51·8	64·2	89·7	0·001	7
25		·144	W.	162	56·5	55·6	64·1	54·1	10·0	59·1	84·0	47·8	64·4	93·0	0·003	10
26	New Moon	·141	W.	114	58·7	56·6	66·2	51·8	14·4	59·0	102·5	45·3	64·6	87·3	0·084	1
27		·183	S.	149	58·6	57·6	64·1	54·0	10·1	59·1	97·2	47·1	64·0	93·7	0·022	0
28		·319	W.	230	54·9	54·2	61·9	54·3	7·6	58·1	74·0	48·1	64·4	95·0	0·535	1
29	G. N. Dec.	·420	N.N.W.	95	57·7	54·5	62·5	50·5	12·0	56·5	96·0	46·1	64·0	80·3	0·088	10
30		·326	N.N.W.	101	57·5	54·8	63·9	53·2	10·7	58·6	89·8	44·1	64·2	84·3	0·002	
31		·087	N.	200	60·8	58·6	64·3	54·8	9·5	59·6	89·0	44·1	64·4	86·3	0·066	11
Means	.....	30·161	W.	5060	59·6	55·7	67·2	53·0	14·2	60·2	98·8	45·0	65·2	78·6	Sum. 1·052	

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·037 above the true mean for the day. Heavy dew 2nd, 3rd, 4th, 12th, 13th, 14th, 16th, 18th, 22nd, 25th and 30th.

SYDNEY, MAY, 1873.

E.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	REMARKS.
1	0·080	6·5	8·0	7·3	1.—Evening fine, and light dew falling. Forenoon showery and cold.
2	0·055	5·5	6·0	5·8	2.—Evening fine until 8·30 p.m., and again after 9 p.m. Light clouds during day.
3	0·087	5·5	5·0	5·3	3.—Clouds formed in the afternoon, and cleared again about 8·50 p.m. Evening hazy, and heavy dew falling.
4	0·080	...	...	3·3	4.—Fine between 1·30 p.m. and 6 p.m., and again after 9 p.m. Forenoon dull.
5	0·180	6·0	9·0	7·5	5.—Forenoon fine until after 1 p.m.; after that, cloudy and fine alternately. Electrometer 0 to 90 during forenoon.
6	0·082	6·0	7·0	6·5	6.—Fine after 6·30 p.m. Evening hazy, and light dew falling. Lunar halo at 7·35 p.m.
7	0·132	6·5	7·0	6·8	7.—Fine after 9 a.m. until 2·30 p.m. Very dry. Electrometer from 0 to 50 during day. Lunar halo 9 p.m.
8	0·162	5·5	7·0	6·3	8.—Fine from 10 a.m. until about noon, and again after 7 p.m. until 8·30 p.m. Atmosphere very dry. Lunar halo at 9 p.m.
9	0·104	5·0	4·0	4·5	9.—Light clouds during day. Electrometer 0 to 30 during forenoon. Lunar ring at 7·45 p.m.
0	0·061	6·0	7·0	6·5	10.—Cloudy, dull. Light thunderstorm, N.W., and drops of rain, 4·8 p.m. until 5 p.m. Shower 5·55 p.m. Lightning N.E. at 5·18 p.m., and during evening.
1	0·058	...	...	3·5	11.—Cloudy an fine alternately. Dew fell in the night.
2	0·061	0·0	4·0	2·0	12.—Evening fine. Lunar eclipse from 8·35 p.m. until 11·15 p.m. Meteor observed, E., at 8·50 p.m., 3rd magnitude.
3	0·075	0·0	4·0	2·0	13.—Fine until noon, and again in the evening. Warm. Heavy dew falling in the evening.
4	0·059	5·0	9·0	7·0	14.—Fine until about 2·45 p.m., and again in the evening. Light dew falling in the evening.
5	0·052	7·0	4·5	5·8	15.—Cloudy from 12·30 p.m. until about 2 p.m. Fresh breeze. Heavy dew falling in the evening.
6	0·156	5·0	6·0	5·5	16.—Light clouds. Hot wind until evening. Atmosphere very dry. Electrometer 0 to 10 at 9 p.m. Evening fine until 8·30 p.m.
7	0·085	5·0	8·5	6·8	17.—No clouds, and warm. Electrometer 0 to 10 at 9 a.m. up to 0 to 40 during forenoon. Heavy dew in the evening.
8	0·055	...	...	4·0	18.—Fine, warm. Small patches of clouds, E., until 9 a.m, after that, no clouds. Morning cold.
9	0·052	5·0	7·0	6·0	19.—Fine after 9·15 p.m. Forenoon very dull and cold. Partial clearing of clouds in afternoon and evening.
0	0·009	5·0	6·5	5·8	20.—Evening fine after 6 p.m. Very dull during day, and light steady rain until 11 a.m.
1	0·037	8·5	8·0	8·3	21.—Evening fine after 6 p.m. Light clouds until noon, when they became heavy. Dew falling in the evening.
2	0·028	5·0	3·0	4·0	22.—Evening fine after 6·30 p.m. Calm at 3 p.m. Heavy dew falling in the evening.
3	0·005	2·5	5·0	3·8	23.—Cloudy, very dull, and cold. Light rain at 9·25 a.m., and at intervals during the evening.
4	0·049	7·5	5·0	6·3	24.—Evening fine after 6·30 p.m. Light clouds during day, and warm. Heavy dew falling in the evening.
5	0·008	...	...	4·0	25.—Cloudy, very dull. Dropping rain at intervals until 4 p.m., when heavy shower fell. Lightning, N.N.E. and N. at 7·55 p.m. Dense fog at 8·30 p.m. until daylight.
6	0·056	5·0	6·0	5·5	26.—Fine. Dew falling in the evening. Shower at midnight.
7	0·025	7·0	7·5	7·3	27.—Fine about 6 p.m. until 7 p.m., and again from 8·30 p.m. until after 10 p.m. Drops of rain, 10·15 p.m. Evening hazy, and dew falling.
8	0·042	6·5	9·0	7·8	28.—Fine about 3 p.m. until after 7 p.m. Steady rain all morning from midnight. Evening showery.
9	0·030	7·5	8·0	7·8	29.—Cloudy and dull. Partial clearing of clouds at noon. Light rain at 8·45 p.m.
0	0·036	6·0	7·0	6·5	30.—Fine from 6·30 p.m. until about 11·30 p.m. Drops of rain, 11·35 p.m. Dull day. Light dew falling in the evening.
1	0·041	8·0	8·0	8·0	31.—Cloudy, dull, like rain. Partial clearing of clouds about noon. Showers at 2·25 a.m. and 7·15 p.m.
	Sum.				
ans	2·042	5·5	6·5	5·7	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·930	29·969	9 p.m.	29·908	5 a.m.	3	8	1	...	10	2	...	...	...	...	...	...	...	...	...	...	298	12·4	0·8	5·1	S.	1·40 p.m.
2	29·802	29·930	9 a.m.	29·745	4 a.m.	...	...	...	1	12	5	6	...	...	...	...	...	...	...	...	...	113	4·7	0·1	0·3	W.	12·40 p.m.
3	29·707	29·765	9 a.m.	29·604	2 a.m.	...	...	...	2	6	16	...	...	...	...	...	...	...	...	...	...	89	3·7	0·1	1·3	W.	1·30 p.m.
4	29·576	29·697	10 a.m.	29·507	3 a.m.	...	...	...	1	7	4	9	3	...	...	...	...	...	...	...	...	140	5·8	0·2	1·1	N.W.	1·12 a.m.
5	29·600	29·703	8 a.m.	29·508	3 p.m.	...	...	...	...	15	7	2	...	...	...	...	...	...	...	...	...	357	14·9	1·1	3·4	W.	6·17 p.m.
6	29·751	29·835	8 a.m.	29·671	3 p.m.	...	...	...	2	9	5	8	...	...	...	...	...	...	...	...	...	217	9·0	0·4	5·4	W.	11· 0 a.m.
7	29·821	29·895	8 a.m.	29·745	3 p.m.	...	...	...	...	...	1	1	19	...	3	...	...	...	...	...	...	203	8·5	0·4	1·1	N.N.W.	12·55 & 6·0 p.m.
8	29·885	29·925	8 a.m.	29·831	3 p.m.	...	...	...	...	...	...	...	3	11	10	...	...	...	...	...	...	320	13·3	0·9	4·2	N.	9· 0 a.m.
9	29·967	30·056	8 a.m.	29·905	3 p.m.	...	...	...	...	...	...	6	6	8	...	4	...	...	...	...	...	183	7·6	0·3	1·6	N.	10·35 a.m.
10	30·114	30·155	8 a.m.	30·075	2 p.m.	8	...	...	...	6	6	4	...	...	...	...	...	...	...	...	...	159	6·6	0·2	2·0	S.	2·20 p.m.
11	30·028	30·151	9 a.m.	29·985	3 a.m.	1	...	...	...	1	2	9	1	2	4	1	2	...	...	...	1	138	5·7	0·2	0·7	N.N.E.	7·10 p.m.
12	29·973	30·031	9 a.m.	29·928	3 p.m.	...	...	...	1	14	8	1	...	...	...	...	...	...	...	...	...	80	3·3	0·1	0·3	W.	11· 0 a.m.
13	29·959	30·017	8 a.m.	29·907	2 p.m.	...	...	...	1	21	2	...	...	...	...	...	...	...	...	...	...	108	4·5	0·1	0·6	W.	5·15 a.m.
14	30·046	30·109	8 a.m.	29·981	3 p.m.	4	1	...	...	18	1	...	...	...	...	...	...	...	...	...	...	152	6·3	0·2	1·6	S.	9·30 p.m.
15	29·997	30·098	10 a.m.	29·910	6 a.m.	...	1	...	1	3	1	2	1	3	9	3	...	...	...	...	...	146	6·1	0·2	1·6	N.E.	1·50 p.m.
16	29·923	30·065	8 a.m.	29·782	3 p.m.	...	2	4	4	7	3	1	3	...	...	...	...	...	...	...	...	345	14·4	1·0	5·1	S.W.	10·35 p.m.
17	30·047	30·094	10 a.m.	29·997	3 p.m.	...	...	...	4	15	...	...	...	...	...	...	...	...	...	...	5	132	5·5	0·2	0·7	W.	4·10 a.m.
18	30·008	30·094	9 a.m.	29·974	2 a.m.	...	...	...	...	9	7	2	...	3	1	1	1	...	...	...	...	127	5·3	0·1	0·7	N.	7·50 p.m.
19	30·015	30·075	8 a.m.	29·958	2 p.m.	...	4	3	1	14	2	...	...	...	...	...	...	...	...	...	...	133	5·5	0·2	0·6	S.	2·30 p.m.
20	30·066	30·106	9 a.m.	30·038	5 a.m.	...	1	1	5	17	...	...	...	...	...	...	...	...	...	...	...	95	4·0	0·1	0·3	S.S.W.	3·15 p.m.
21	29·988	30·080	9 a.m.	29·941	5 a.m.	...	...	...	...	6	1	...	...	9	1	6	...	...	...	...	1	146	6·1	0·2	0·7	W.	7·45 a.m.
22	29·984	30·119	8 a.m.	29·889	2 p.m.	...	...	...	...	12	12	...	...	...	...	...	...	...	...	...	...	99	4·1	0·1	0·6	W.	10·30 a.m.
23	30·090	30·118	9 p.m.	30·055	6 a.m.	3	6	2	2	11	...	...	...	...	...	...	...	...	...	...	...	129	5·4	0·1	1·0	S.S.W.	5·50 p.m.
24	29·991	30·091	9 a.m.	29·930	4 & 5 a.m.	...	...	...	...	8	2	...	...	5	4	3	...	...	...	...	2	100	4·2	0·1	1·0	E.N.E.	3·30 p.m.
25	29·929	29·986	10 a.m.	29·914	*	...	...	...	1	...	18	4	1	...	...	...	...	...	...	...	...	162	6·8	0·2	2·6	W.	3·25 p.m.
26	29·937	29·970	8 a.m.	29·894	3 p.m.	6	2	...	...	9	7	...	...	...	...	...	...	...	...	...	...	114	4·8	0·1	0·5	S.	4· 0 p.m.
27	30·014	30·104	8 a.m.	29·953	3 p.m.	5	2	4	2	4	1	...	...	...	...	...	...	...	...	5	1	149	6·2	0·2	1·4	S.S.W.	11·17 a.m.
28	30·184	30·236	8 a.m.	30·136	9 a.m. & 1, 2, 3 p.m.	8	2	...	1	12	1	...	...	...	...	...	...	...	...	...	...	230	9·6	0·5	2·2	S.	3·35 p.m.
29	30·178	30·239	9 a.m.	30·129	4 & 5 a.m.	6	...	...	1	5	...	1	8	2	1	...	...	...	...	...	...	95	4·0	0·1	0·6	E.N.E.	10·35 p.m.
30	29·980	30·135	9 a.m.	29·899	7 & 8 a.m.	...	...	...	...	...	...	2	11	3	7	1	...	...	...	...	...	101	4·2	0·1	1·4	N.	7·45 a.m.
31	29·850	29·907	9 a.m.	29·822	6 a.m.	...	...	...	...	...	...	...	11	13	...	...	...	...	...	...	...	200	8·3	0·4	3·1	N.	12·25 p.m.
Sums or Means.	29·946	May 29th. 30·239	9 a.m.	May 4th. 29·507	3 a.m.	44	29	16	29	269	100	55	66	59	40	19	3	...	...	5	10	Sum 5060	Mean. 6·8	Mean. 0·3			

* 1, 5, 6, & 10 p.m., and 1, 2, 3, & 4 a.m.

A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of MAY, 1873.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., May, 1873.						Temperature in Shade.				For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.					Rain.				Evaporation in inches.
						Direction	Force 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
argomindah	...	...	30·165	64·9	54·0	.....	...	...	76·7	53·1	81·4	45·0	0·910	1	0·910	31	2·794
nterfield ...	80	...	...	...	..	.....	...	...	...	...	...	...	...	...	...	...	...
afton	22	...	...	59·3	...	N.W.	0·2	1·6	81·7	36·9	84·7	27·2	0·050	1	0·050	29	3·761
urke	393	...	...	57·2	...	S.	0·0	1·1	66·5	47·9	79·4	37·9	0·750	1	0·750	31	...
rrabri	196	...	...	63·6	...	S.W.	1·0	0·9	79·0	48·1	85·5	40·5	0·120	3	0·060	31	4·202
midale.....	80	3278	...	51·0	62·0	W.	1·0	4·3	63·2	38·8	66·7	34·1	1·340	7	0·500	24 / 30	1·478
rt Macquarie	0	...	...	61·5	...	S.W.	1·4	3·5	70·6	52·4	75·2	50·8	1·900	6	0·750	21	4·135
rrurundi ...	94	1545	...	54·9	...	W.	0·4	2·1	65·6	44·1	71·1	35·3	...	...	...	...	...
ssilis	120	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
swellbrook..	68	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
bbo	182	...	...	53·9	...	N.E.	0·3	...	64·2	43·5	71·9	38·9	1·230	2	1·130	31	2·611
dgee	121	...	...	51·5	...	S.	0·2	5·9	64·0	38·9	70·4	30·0	0·600	2	0·450	31	...
lwood	27	...	...	...	...	.....	...	...	...	...	...	...	0·740	2	0·690	26	...
est Maitland	18	...	...	51·9	...	W.	1·3	4·7	56·8	46·9	70·6	40·5	0·520	5	0·200	31	2·315
mbton	7	...	...	55·5	...	W.	1·2	...	69·2	41·7	75·3	37·0	0·530	3	0·250	29	...
wcastle	1	112	30·137	61·2	79·0	N.W.	0·2	3·0	70·0	52·3	77·3	45·3	2·320	7	1·070	28	...
ange.....	124	2891	...	47·1	...	N.W.	0·5	...	57·5	36·7	64·5	26·1	1·040	3	0·500	26	1·092
thurst	96	2200	30·161	49·4	86·0	W.	0 8	4·0	67·2	31·6	73·5	20·0	0·620	3	0·350	26	...
rbes	176	...	...	55·3	...	.....	...	...	68·7	41·8	76·2	31·1	...	...	...	...	...
rrajong	36	1870	...	52·5	...	E.	...	...	58·8	46·2	67·0	38·0	0·700	5	0·300	25	...
unt Victoria	61	3490	30·122	50·7	76·0	W.	0·0	4·7	59·5	41·8	66·1	29·9	0·420	4	0·220	26	3·423
odford	50	2192	30·045	55·6	...	W.	0·0	...	59·9	51·2	68·5	41·4	0·620	6	0·230	11	...
dney.....	5	155	30·161	60·2	78·6	W.	0·3	6·4	67·2	53·0	78·3	46·5	1·025	11	0·535	28	2·042
verpool.....	16	...	30·113	54·6	...	.....	...	2·6	64·6	44·6	75·0	36·0	0·234	6	0·160	26	...
entworth.....	476	...	...	57·9	...	S.	1·5	4·7	67·6	48·1	78·3	37·5	1·660	6	0·580	30	3·334
ilton	13	...	...	...	...	.....	...	...	...	...	...	...	0·420	3	0·250	25	...
rdeaux River	6	...	...	...	...	.....	...	...	...	...	...	..	0·340	4	0·120	26	...
ung	140	...	...	51·1	...	S.	0·4	...	63·7	38·4	74·0	26·1	1·380	4	0·630	31	3·002
ollongong ...	0	...	...	59·5	...	S.W.	1·5	5·4	66·6	52·4	76·4	42·7	No	rain	recor	ded.	2·555
ss Vale	31	...	...	50·1	...	W.	0·9	...	56·6	43·6	65·4	31·8	0·250	1	0·250	26	...
ulburn.....	54	2129	30·165	51·7	85·0	N.W.	0·0	4·6	65·7	37·6	75·2	24·8	0·270	2	0·200	31	2·428
rara	4	...	...	...	...	.....	...	...	...	...	...	...	0·090	1	0·090	31	...
agga Wagga	161	...	...	50·5	...	W.	0·4	...	59·7	41·2	71·1	30·9	0·720	2	0·580	31	2·377
pe St. George	0	175	30·099	60·0	74·0	W.	1·1	5·2	67·2	52·7	73·2	43·6	1·920	6	0·530	28	...
eanbeyan ...	60	...	...	42·3	...	W.	0·4	4·9	47·7	36·9	56·2	28·1	0·460	3	0·300	31	1·746
ana	218	...	...	54·8	...	W.	0·5	...	67·5	42·1	73·5	32·1	0·780	4	0·300	31	2·920
niliquin	287	410	30·232	53·6	87·0	N.W.	1·0	3·9	67·0	40·2	79·3	32·2	1·650	8	0·580	31	...
andra	88	4640	30·101	35·8	82·0	N.W.	1·5	5·9	49·5	22·1	60·5	7·6	4·270	8	1·100	5	...
oma	52	2637	...	48·0	...	S.	2·0	7·6	63·2	32·7	73·6	17·8	0·120	2	0·080	24	0·948
bury	175	572	30·126	51·5	81·0	N.E.	0·8	5·3	65·7	37·2	76·4	27 3	1·640	7	0·460	31	...
len.....	0	107	30·079	56·8	75·0	S.W.	1·1	6·1	63·0	50·6	69·0	45·1	0·400	4	0·120	1&10	...

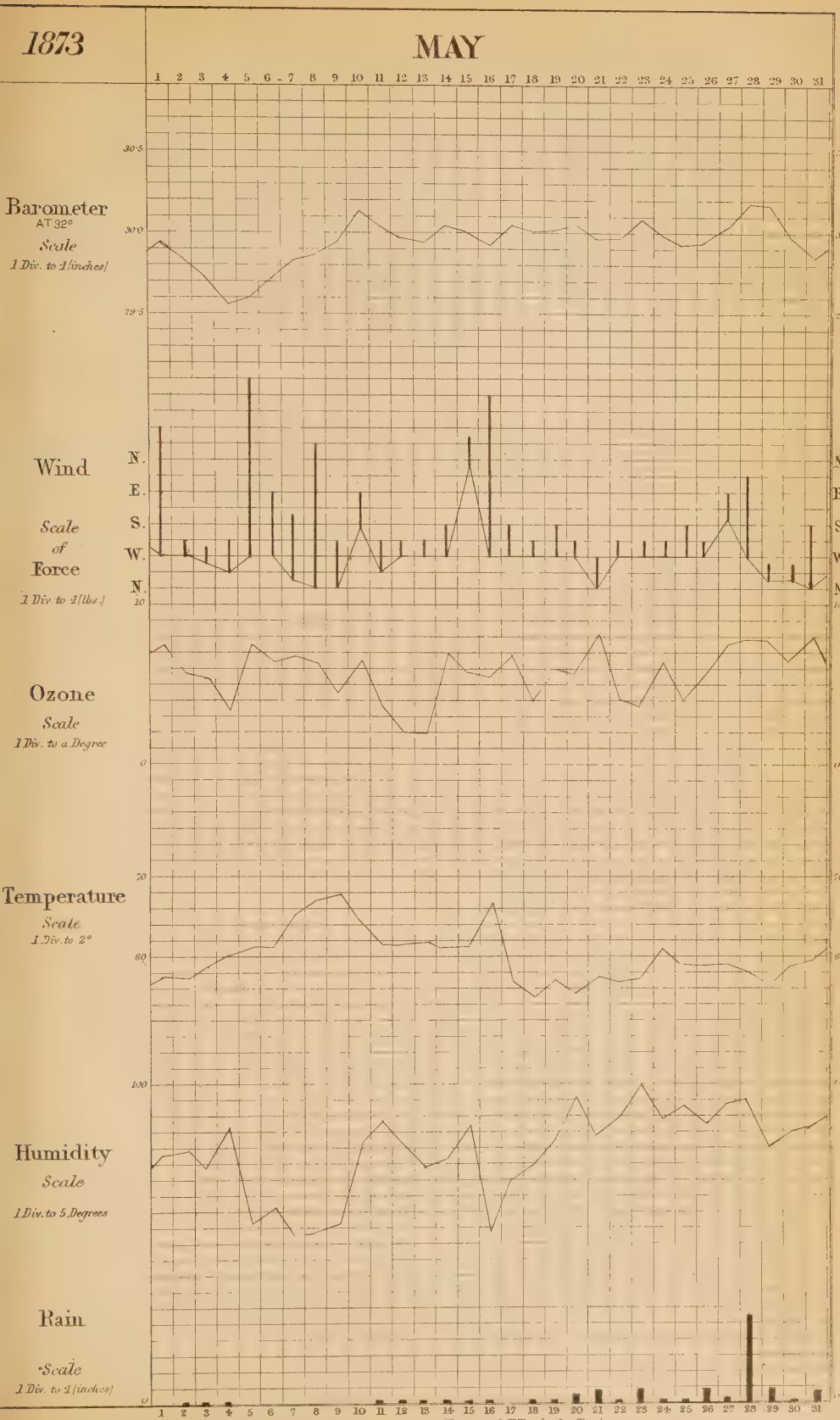
rranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Hot, 4th; close and muggy during month; and thunderstorm, 31st.
Grafton—Foggy, 3rd, 8th, 12th, 13th, and 22nd.
Bourke—Lunar eclipse, 12th.
Narrabri—Thunderstorms, 25th and 26th; plants flowering; unusually dry.
Port Macquarie—Thunderstorm, 11th; squally, 1st.
Murrurundi—Foggy, 27th, and 30th.
Dubbo—Heavy rain, 29th.
Mudgee—Slight shock of earthquake 19th; and frosty and foggy during month.
Dalwood—Thunderstorm, 25th.
West Maitland—Gale, 5th; and cold during month.
Lambton—Lunar eclipse, 12th; meteor, 16th; thunder and lightning during the month.
Newcastle—Heavy sea, 1st; lunar eclipse, 12th.
Orange—Frosty and foggy during month.
Bathurst—Frosty and foggy during the month.
Kurrajong—Thunderstorms, 10th and 25th; frost 17th.
Mount Victoria—Thunderstorm, 10th; stormy, 5th, 6th, and 16th; shock of earthquake, 19th, at 6·24 p.m.; and frosty and foggy during month.
Woodford—Shock of earthquake, 19th, at 6·30 p.m.
Sydney—Thunderstorm, 10th; eclipse of Moon, 12th; hot wind, 16th; dense fog, 25th.
Liverpool—Thunderstorm, 10th; lunar eclipse, 12th; squall, 16; foggy, 7th, 8th, 9th, 16th, and 25th; and h W. wind, 5th.
Wentworth—Squally, 5th; lunar eclipse, 12th.
Cordeaux River—Frost, 17th and 18th; thunderstorm, 26 heavy dews during month.
Moss Vale—Lunar eclipse, 12th; white frost, 17th and 18 and foggy, 24th and 27th.
Goulburn—Lunar eclipse, 12th; and frosty and foggy dur month.
Wagga Wagga—Foggy during month.
Cape St. George—S. gales, 1st and 2nd; and lunar ecli 12th.
Queanbeyan—Thunderstorm, 5th; gale, 16th; frosty foggy during month.
Urana—Frosty, 17th; and foggy, 20th and 28th.
Deniliquin—Thunderstorm, 4th; lunar eclipse, 12th; fro 20th and 27th.
Kiandra—Thunderstorm 4th; lunar eclipse, 12th; frosty foggy during month.
Cooma—Hard frost, 17th, and frosty and foggy during mo
Albury—Thunderstorm, 4th; and foggy during month.
Eden—Total eclipse of Moon, 12th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney.

——— *Heavy Dew 2nd and 3rd, 4th, 12th, 13th, 14th, 15th, 16th, 18th, 22nd, 25th & 30th*

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF JUNE, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[Price 6d.] 3u 28—73

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s

Magnetic Variation 9° 32′ 22″ East.

JUNE, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	30·327	... On the 23rd, at 9 a.m.
	Lowest Reading	29·124	... On the 5th, at 1 a.m.
	Mean Height	29·928	

(Being 0·003 in. greater than that in the same month on an average of the preceding 14 years.)

WIND	Greatest Pressure... ...	15·7 lbs.	... On the 5th.
	Mean Pressure	0·7 lbs.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 14 years W.)

TEMPERATURE	Highest in the Shade ...	70·4	... On the 2nd.
	Lowest in the Shade ...	45·1	... On the 24th.
	Greatest Range	17·8	... On the 8th.
	Highest in the Sun ...	105·6	... On the 1st.
	Highest in Black Box with Glass Top	133·6	... On the 24th.
	Lowest on the Grass ...	33·9	... On the 30th.
	Mean Diurnal Range	10·3	
	Mean in the Shade ...	57·8	

(Being 3·2 greater than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	On the 6th, 9th, 10th, 11th, 12th, 17th, 26th, and 27th.
	Least	55·0	... On the 30th.
	Mean	86·4	

(Being 10·4 greater than that of the same month on an average of the preceding 14 years.)

RAIN	Greatest Fall	3·934 inch.	On the 5th.
	Number of Days	17 rain and 8 dew.	
	Total Fall	8·077 inch.	65 ft. above the ground.
		10·518 inch.	15 inches above the ground.

(Being 5·354 inches greater than that of the same month on an average of the preceding 14 years.)

EVAPORATION	Total Amount	1·376 inches.
OZONE	Mean Amount	6·8

(Being 1·6 greater than that in the same month on an average of the preceding 14 years.)

ELECTRICITY ..	Number of Days Lightning	4
CLOUDY SKY ..	Mean Amount	7·0
	Number of Clear Days ...	5
METEORS ..	Number Observed ...	0

REMARKS.

The temperature during the month was 3·2 in excess of the average and the humidity also 10·4 in excess, accompanied by very cloudy weather and heavy rain; this is the more remarkable because the wind was so persistently westerly. At Sydney the rain-fall was upwards of 5 inches above the average, and at 22 of the Country Stations the total fall was over 7 inches; and at the Cordeaux River the fall amounted to 16 inches. Between the 14th and 18th the rain-fall was heaviest; at 9 stations over 3 inches in one day. Floods of course followed, and on the 12th the Cudgegong and Lawson's Creek were bank high. The Hunter at Maitland was up 8 feet and rising 1 foot per hour. At Tamworth, the Peel and Cockburn Rivers and Goonoo Goonoo Creek were in high flood which had not been equalled since 1864. The lower part of the town and low lands were flooded. At Inverell the Macintyre rose 12 feet during the day. On the 16th at Richmond, river 12 feet above bridge and rising fast. Windsor, 10 feet above ordinary level and rising 8 inches per hour. River at Maitland up 17 feet. Mururundi, river bank high. Goulburn river, rising. West Kempsey, river rising. Armidale, all creeks flooded. 17th June, flood at West Maitland, 21½ feet and still rising. Penrith, river up 24 feet. Murrurundi, river bank high. Grafton, much damage done to crops. 18th June, river up 28 feet at Windsor. At Grafton, wharves under water. Gunnedah, part of town, and country everywhere flooded. Lunar halo at Sydney on 6th; rings on 7th and 13th. Planet Venus visible to naked eye about 10 a.m., 20th and afterwards.

SYDNEY, JUNE, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.								Humidity 0-100.	Rain.	C
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.	Inches.	T
1		30·020	N.N.W.	115	60·0	58·6	68·2	58·7	9·5	63·5	105·6	52·4	64·0	91·0	0·011	I
2	Apogee.	·052	N.N.W.	75	62·7	59·1	70·4	57·1	13·3	63·8	103·8	50·2	64·2	80·0	0·002	
3	First Qr.	·159	N.N.W.	91	57·1	54·1	65·3	49·6	15·7	57·5	103·0	41·2	64·0	83·0	0·004	
4		·211	S.E.	384	57·6	56·7	65·9	50·6	15·3	58·3	69·8	43·0	64·2	93·7	0·001	I
5	In Equat.	29·690	N.E.	275	62·5	61·5	66·6	52·2	14·4	59·4	97·0	49·3	64·0	93·0	3·934	
6		·692	N.W.	221	57·8	55·7	62·9	52·6	10·3	57·8	95·8	44·9	64·2	86·7	1·003	I
7		·888	N.W.	212	58·4	54·2	64·1	54·5	9·6	59·3	95·5	49·7	63·6	74·3	0·042	
8		30·071	N.	142	50·7	49·7	65·1	47·3	17·8	56·2	103·0	35·9	63·2	92·0	0·001	I
9		·139	N.N.W.	69	58·5	57·3	62·7	50·6	12·1	56·7	69·9	42·9	63·4	91·7	0·001	I
10		·230	W.	51	58·1	58·0	59·8	56·3	3·5	58·1	66·5	50·2	63·0	99·3	0·360	I
11	Full Moon	·306	S.	187	57·7	57·7	59·4	56·1	3·3	57·8	63·5	51·6	63·2	100·0	0·145	I
12	G. S. Dec.	·138	N.N.E.	114	59·1	59·0	61·1	56·9	4·2	59·0	84·0	54·1	62·6	99·3	0·972	I
13		·145	W.	216	56·1	53·6	60·8	53·7	7·1	57·3	96·2	47·6	62·8	83·3	0·120	
14	Perigee at Midnight	·251	S.S.W.	195	53·8	52·2	62·1	45·9	16·2	54·0	89·9	38·6	63·6	88·7	0·001	I
15		·185	E.	390	61·0	60·5	65·3	48·3	17·0	56·8	67·9	46·1	62·2	96·0	0·520	
16		·172	E.N.E.	539	65·1	64·3	66·7	60·8	5·9	63·8	72·5	57·2	62·4	94·3	1·650	I
17		·118	N.E.	483	66·1	65·5	68·1	63·4	4·7	65·8	81·0	59·6	62·2	96·3	0·339	
18	In Equat. Last Qr.	·026	N.E.	406	66·7	65·8	68·3	65·2	3·1	66·8	73·8	60·7	62·0	94·3	0·021	
19		29·787	W.S.W.	295	65·0	63·2	70·2	63·9	6·3	67·1	91·7	57·1	62·2	89·3	0·021	
20		·758	W.	559	56·0	49·9	61·0	54·9	6·1	58·0	97·9	44·9	62·4	64·7	0·080	
21		30·123	W.	294	53·5	48·9	60·1	47·0	13·1	53·6	94·3	38·0	62·0	71·0	·0	
22		·378	W.	178	48·5	45·5	59·8	46·5	13·3	53·2	96·0	37·1	62·2	79·0	·0	
23		·481	W.	243	52·8	49·9	59·3	45·6	13·7	52·5	93·0	37·4	62·4	81·7	0·001	
24		·513	W.	167	51·8	48·4	60·3	45·1	15·2	52·7	96·5	36·8	62·2	79·0	·0	
25	G. N. Dec. New Moon.	·436	W.	280	52·3	49·7	60·0	45·6	14·4	52·8	97·9	38·0	62·0	82·3	0·001	
26		·411	S.S.W.	199	55·0	53·1	60·2	47·8	12·4	54·0	82·0	39·5	62·2	87·7	·0	
27		·457	W.	128	53·9	53·9	56·7	51·8	4·9	54·3	68·7	48·1	62·4	99·7	1·040	
28		·376	N.	248	55·7	52·9	60·9	52·2	8·7	56·6	90·0	42·3	62·0	83·0	0·238	
29		·005	W.N.W.	263	54·7	51·0	58·5	49·1	9·4	53·8	80·3	39·7	62·4	76·0	·0	
30	Apogee.	29·996	W.	468	52·2	46·0	57·4	48·0	9·4	52·7	92·7	33·9	62·0	62·3	0·010	
Means	.....	30·140	W.	7487	57·3	55·2	62·9	52·6	10·3	57·8	87·3	45·6	62·8	86·4	Sum. 10·518	

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·029 above the true mean for the day. Heavy dew 2nd, 3rd, 4th, 8th, 9th, 14th and 25th.

SYDNEY, JUNE, 1873.

TE.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	REMARKS.
1	0·046	...	...	4·5	1.—Cloudy. At 5 p.m. clouds cleared and formed again. Clouds finally cleared after 9 p.m. Lightning S. at 8·40 p.m. Dew fell in the night.
2	0·060	5·0	5·0	5·0	2.—Light clouds formed towards evening, and cleared again about 8·45 p.m. Dew falling in the evening.
3	0·031	3·5	6·5	5·0	3.—Fine. Evening very hazy and dew falling.
4	.....	8·5	6·5	7·5	4.—Cloudy, very dull. Evening stormy. Raining at intervals during forenoon. Steady rain all afternoon and evening, also during night.
5	0·055	9·0	9·0	9·0	5.—Heavy rain until 11 a.m. Fine between 1 p.m. and 2 p.m., and again after 6 p.m. Light thunderstorm, N.N.E., at 5·30 p.m. Lightning E.N.E. Very heavy shower at 6 p.m.
6	0·062	6·5	8·0	7·3	6.—Cloudy. Lightning at 6 a.m. Steady rain all morning from 6·15 a.m. Lunar halo at 9 p m.
7	0·079	8·5	8·0	8·3	7.—Fine from 5 p.m. until after 7 p.m. Morning dull. Lunar ring at 9 p.m. 30° diameter.
8	0·029	...	...	4·0	8.—Fine for a little while in the evening. Morning foggy. Clouds light during day. Light dew fell in the night.
9	·0	4·5	7·0	5·8	9.—Cloudy, dull Light rain dropping at 1·45 p.m. until about 4·30 p.m., then steady rain during afternoon and evening.
0	·0	5·0	3·5	4·3	10.—Cloudy, dull. Dropping rain at 12·15 p.m. until 1 p.m., and again at 2·30 p.m. Light rain at 5 p.m. Morning foggy.
1	·0	4·0	9·0	6·5	11.—Cloudy. Raining all morning, also during afternoon and evening from 12·15 p.m. Forenoon foggy looking.
2	·0	8·0	8·5	8·3	12.—Cloudy, very dull. Light steady rain all night, and at intervals during forenoon and afternoon. Morning foggy.
3	0·073	6·0	8·0	7·0	13.—Cloudy and fine alternately. Fresh breeze. Lunar ring at 9 p.m., about 45° diameter.
4	·0	4·0	8·0	6·0	14.—Cloudy, dull, and cold. Raining at 8·40 p.m.
5	0·062	...	...	4·0	15.—Cloudy. Stormy, also steady rain until evening. Evening showery.
6	0·033	8·5	9·5	9·0	16.—Cloudy, dull, and stormy. Forenoon showery. Light rain between 7 p.m. and 8 p.m.
7	0·033	10·0	10·0	10·0	17.—Cloudy, dull, and stormy. Forenoon and afternoon showery.
8	0·029	10·0	8·5	9·3	18.—Cloudy, dull, also fresh breeze. Light rain at intervals.
9	0·078	6·5	8·5	7·5	19.—Cloudy, dull, began raining at 7·50 p.m. Fresh breeze in the evening.
0	0·150	8·0	8·0	8·0	20.—Cloudy and fine alternately. Very strong dry breeze. Venus visible with the naked eye at 10·30 a.m. Lightning E. and E S.E. and 7·50 p.m.
1	0·098	8·0	7·0	7·5	21.—Fine. Fresh dry breeze. Venus visible with the naked eye at 10 a.m. Electrometer 0 to 20 at 3·35 p.m.
2	0·053	...	...	3·5	22.—Fine. Cold. Clouds forming S.W. after 8 p.m. Light dew fell in the night.
3	0·084	5·0	7·0	6·0	23.—Fine at 2 p.m., and clouded up again, final clearing after 8·30 p.m. Light clouds during forenoon.
4	0·041	1·5	8·5	5·0	24.—Fine. Cold. Evening hazy and dew falling.
5	0·060	7·0	9·0	8·0	25.—Cloudy and fine alternately. Fresh breeze.
6	·0	7·5	9·0	8·3	26.—Cloudy. Morning dull. Light rain from 4·15 p.m. until 6·45 p.m. Raining heavily after 8 p.m.
7	·0	9·0	9·5	9·3	27.—Cloudy, dull, and showery. Rainbow S.E. at 2 p.m. Partial clearing of clouds between showers.
8	0·058	6·5	10·0	8·3	28.—Fine at 4.45 p m., and turned cloudy again about 5·30 p.m. Final clearing of clouds a little before 7 p.m.
9	0·050	...	...	4·5	29.—Evening fine. Afternoon dull. Shower at 1·40 p.m. Lightning along coast during evening.
0	0·112	7·0	7·0	7·0	30.—Fine. Very cold, also strong dry breeze. Electrometer 0 to 90 in the afternoon.
	Sum.				
eans	1·376	6·7	7·9	6·8	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																		
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·749	29·840	9 a.m.	29·700	4 p.m.	...	...	1	3	3	6	3	8	...	...	...	...	...	...	...	...	115	4·8	0·1	0·6	W.N.W.	8·15 a.m.
2	29·887	·965	8 a.m.	·810	2 p.m.	...	...	...	...	2	1	...	12	2	...	...	...	1	2	...	...	75	3·1	0·0	0·3	N.N.W.	2·15 a.m.
3	29·972	30·016	8 a.m.	·926	2 & 3 p.m.	...	...	...	...	5	4	7	8	...	...	...	...	...	...	...	...	91	3·8	0·1	0·4	W.	6·45 a.m.
4	29·841	*·030	10 a.m.	*·540	8 a.m.	3	...	...	1	3	1	...	...	...	...	...	...	...	2	9	5	384	16·0	1·3	6·8	S.E.	2·35 a.m.
5	29·487	29·529	9 a.m.	·424	1 p.m.	...	...	...	1	...	2	1	3	1	2	6	6	2	...	...	...	275	11·5	0·7	15·7	N.E.	11·47 a.m.
6	29·556	·678	8 a.m.	·489	1 & 2 p.m.	...	...	...	...	1	5	15	3	...	...	...	...	...	...	...	...	221	9·2	0·4	1·3	N.W.	11·25 p.m.
7	29·757	·868	8 a.m.	·668	1 & 2 p.m.	...	...	...	...	5	6	13	...	...	...	...	...	...	...	...	...	212	8·8	0·4	1·8	N.W.	12·40 p.m.
8	29·880	·940	8 a.m.	·818	2 p.m.	...	...	...	...	4	2	2	2	6	3	4	...	1	...	...	...	142	5·9	0·2	1·8	N.E.	5·30 p.m.
9	29·979	30·034	8 a.m.	·933	(12 noon and 1 p.m.	...	...	...	...	2	2	3	12	4	...	...	1	...	...	...	...	69	2·9	0·0	0·6	E.N.E.	11·30 p.m.
10	30·071	·113	(10 p.m. & 8 a.m.	30·018	2 p.m.	...	...	...	...	20	1	2	1	...	...	...	...	...	...	...	...	51	2·1	0·0	0·4	W.	12· 5 p.m.
11	30·015	·120	9 a.m.	29·919	5 a.m.	12	5	4	1	2	...	...	...	...	...	...	...	...	...	...	...	187	7·8	0·3	1·6	S.	4·50 a.m.
12	29·899	29·964	10 & 11 a.m.	·824	5 a.m.	1	...	1	...	1	2	2	3	1	12	...	1	...	...	...	...	114	4·8	0·1	2·0	N.W.	8·57 a.m.
13	30·001	30·050	8 a.m.	·938	3 p.m.	...	...	...	...	13	5	5	1	...	...	...	...	...	...	...	...	216	9·0	0·4	1·8	W.	3·10 p.m.
14	30·022	·063	9 a.m.	30·001	4 & 12 p.m.	3	8	2	1	7	2	...	...	...	...	...	...	...	...	...	1	195	8·1	0·3	3·6	S.S.E.	7·50 a.m.
15	29·977	·013	10 p.m.	29·933	3 p.m.	...	...	...	...	...	...	...	...	...	...	...	1	11	2	6	4	390	16·3	1·3	5·1	S.E.	12·10 p.m.
16	29·960	29·997	10 a.m.	·917	7 a.m.	...	...	...	...	...	...	...	...	...	...	1	21	2	...	...	...	539	22·5	2·5	10·1	E.N.E.	1·35 p.m.
17	29·873	·941	9 a.m.	·833	5 a.m.	...	...	...	..	...	...	...	...	...	2	17	5	...	...	...	...	483	20·1	2·0	5·8	N.E.	2·47 p.m.
18	29·780	·855	10 a.m.	·680	1 a.m.	...	...	...	...	...	...	...	...	...	7	17	...	...	...	...	...	406	16·9	1·4	6·8	N.N.E.	10·12 a.m.
19	29·477	·605	9 a.m.	·440	1 a.m.	...	...	...	5	5	5	4	2	1	...	2	...	...	...	...	...	295	12 3	0·7	6·5	W.S.W.	6· 0 a.m.
20	29·692	·842	6 a.m.	·536	1 p.m.	...	...	...	5	18	1	...	...	...	...	...	...	...	...	...	...	559	23·3	2·7	8·4	W.	10·25 & 11·0, am.
21	30·030	30·178	8 a.m.	·920	1 & 2 p.m.	...	3	2	5	14	...	...	...	...	...	...	...	...	...	...	...	294	12·3	0·7	3·1	W.S.W.	11· 0 a.m.
22	30·201	·266	8 a.m.	30·149	2 p.m.	...	3	4	...	16	1	...	...	...	...	...	...	...	...	...	...	178	7·4	0·3	1·1	W.	10·30 a.m.
23	30·297	·327	9 p.m.	·261	4 p.m.	5	4	...	...	15	...	...	...	...	...	...	...	...	...	...	...	243	10·1	0·5	1·6	S.S.W.	3·15 p.m.
24	30·241	·322	9 a.m.	·200	5 a.m.	5	...	...	2	17	...	...	...	...	...	...	...	...	...	...	...	167	7·0	0·2	1·3	W.	10·40 a.m.
25	30·197	·250	9 a.m.	·167	4 p.m.	...	2	5	3	13	1	...	...	...	...	...	...	...	...	...	...	280	11·7	0·7	1·4	S.	3· 5 p.m.
26	30·202	·249	8 a.m.	·159	3 p.m.	2	8	4	4	6	...	...	...	...	...	...	...	...	...	...	...	199	8·3	0·3	3·4	S.S.W.	1·15 p.m.
27	30·216	·271	8 a.m.	·177	5 a.m.	1	4	3	5	11	...	...	...	...	...	...	...	...	...	...	...	128	5·3	0·1	0·7	S.S.W.	1·20 p.m.
28	30·014	·206	10 a.m.	29·840	8 a.m.	...	...	...	...	2	...	1	7	10	4	...	...	...	...	...	...	248	10·3	0·5	2·0	N.	11·30 p.m.
29	29·755	29·833	10 a.m.	·702	4 p.m.	...	...	...	...	3	12	...	2	7	...	...	...	...	...	...	...	263	11·0	0·6	5·8	W.	7·45 a.m.
30	29·817	·846	7 am.	·776	3 p.m.	...	...	...	5	19	...	...	...	...	...	...	...	...	...	...	...	468	19·5	1·9	5·4	W.	3·25 p.m.
Sums or Means.	29·928	June 23rd, 30·327	9 p.m.	June 5th, 29 424	1 p m.	32	37	26	41	207	59	58	64	32	30	47	35	17	6	15	10	Sum 7487	Mean. 10·4	Mean. 0·7			

* The day begins at 9 a.m., hence 22 hours intervenes between these readings.

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of JUNE, 1873.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., June, 1873.									For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.	Temperature in Shade.				Rain.				Evaporation in inches.
						Direction	Force 0-6		Mean Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·225	55·9	85·0	.....	...	...	65·4	46·3	70·4	40·0	3·970	6	3·100	1	1·941
Tenterfield ...	80	...	...	...	..	E.	1·0	5·7	59·1	...	66·1	...	9·200	14	1·500	6	1·881
Grafton	22	...	...	58·0	...	N.W.	0 2	5·1	75·0	40·9	83·2	25·4	9·990	13	4·460	16	1·907
Bourke	393	...	...	54·8	...	W.	0·0	2·9	62·5	47·1	72·4	37·9	2·450	12	0·850	19	...
Narrabri	196	...	...	57·1	...	W.	1·0	4·2	64·3	49·8	71·9	38·5	9·710	16	2·130	10	1·994
Armidale.....	80	3278	...	50·9	85·0	E.	1·2	8·1	...	...	...	...	3·700	16	...	...	2·733
Port Macquarie	0	...	...	60·3	...	S.W.	1·9	5·8	66·4	54·1	71·7	41·9	7·705	17	3·060	16	4·331
Murrurundi ...	94	1545	...	52·7	...	W.	0·1	6·4	59·8	45·6	68·0	33 3	14·050	7	8·950	16	...
Cassilis	120	...	...	51·8	...	N.	0 2	0·5	59·8	43 8	66.1	31·2	9·530	11	2·100	12	1·295
Muswellbrook..	68	...	...	54·4	...	S.E.	0·9	6·6	62·6	46·2	71·7	31·4	5·440	16	1·100	5	...
Dubbo	182	...	...	54·1	...	N.E.	0·6	...	61·3	46·9	68·9	39·9	7·390	13	2·030	12	1·139
Mudgee	121	1500	...	51·8	...	N.N.W.	0·9	...	58·2	45·3	64·4	33·0	7·230	14	1·400	12	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	6·580	11	...	...	...
West Maitland	18	...	...	55·9	...	W.	1·7	6·6	60·4	51·3	71·8	42·4	6·590	14	1·500	5	2·404
Lambton	7	...	...	54·4	...	W.	1·2	...	63·2	45·5	69·3	34·0	7·980	14	2·100	5	1·070
Newcastle	1	112	30 104	58·0	86·0	N.W.	0·4	5·3	64·1	51·8	70·8	42·8	7·950	17	1·510	5	...
Orange.....	124	2891	...	47·7	...	W.	1·2	7·3	54·1	41·2	64·6	29·5	7·510	18	1·340	12	0·552
Bathurst	96	2200	30·129	44·2	85·0	S.E.	1 0	6·0	50·7	37·6	68·5	25·0	4·550	13	1·100	12	...
Forbes	176	...	...	55·1	...	.....	...	...	66·5	43·7	71·2	32·1	No	rain	recor	ded.	...
Kurrajong	36	1870	...	49·0	...	W.	...	...	53·5	44·4	61·0	36·0	6·080	14	1·360	4	...
Mount Victoria	61	3490	30·120	46·4	93·0	W.	0·0	6·7	53·0	39·8	62·1	28·9	10·800	15	2·500	17	0·828
Woodford	50	2192	30·030	51·5	...	W.	0·0	...	55·0	48·0	61·5	42·4	14·120	14	3·350	5	...
Parramatta.....	16	...	...	53·7	...	E.	0·7	5·8	66·6	40·8	78·0	20·9	5·300	11	2·450	16	...
Sydney.....	5	155	30·140	57 8	86 4	W.	0·7	7·0	62·9	52·6	70·4	45·1	10·518	17	3·934	5	1·376
Liverpool.....	16	...	30·086	53·6	...	W.	0·4	5·8	60·5	46·7	67·0	37·0	7·600	15	2·760	5	...
Wentworth.....	476	...	...	52·8	...	S.W.	1·2	4·0	61·1	44·4	67·7	33·7	0·780	7	0·320	29	2·031
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	8·360	15	3·000	4	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	..	16·060	16	5·740	5	...
Young	140	...	...	50·9	...	E.	0·4	...	59·5	42·2	72·0	29·1	4·550	15	0·770	29	3·238
Wollongong ...	0	...	...	56·1	...	S.W.	2·1	8·5	62·2	49·9	69·4	42·7	9·060	12	3·000	5	1·933
Moss Vale	31	...	...	47·6	...	W.	0·8	...	51·9	43·3	59·4	32·8	9·380	14	2·400	5	...
Goulburn.....	54	2129	30·169	49·9	97·0	S.E.	0·0	7·0	59·3	40·5	66·5	25·8	4·340	17	0·950	12 / 16	2·718
Terara	4	...	...	...	...	.....	...	...	...	...	...	...	12·300	18	4·810	5	...
Wagga Wagga	161	...	...	51·0	...	W.	0·3	...	58·4	43·6	65·1	33·9	3·620	15	1·080	19	4·026
Cape St. George	0	175	30·100	58·2	77·0	W.	1·5	6·4	64·0	52·3	68·2	43·6	7·350	18	1·410	5	...
Queanbeyan ...	60	...	...	43·3	...	S.S.E.	0·4	6·1	46·3	40·3	59·2	29·1	3·200	9	0·780	6	1·336
Urana	218	...	...	52·6	...	N.W.	0·5	6·7	61·6	43·5	71·5	34·1	2·820	13	0·510	19	1·439
Deniliquin	287	410	30·273	50·7	91·0	S.W.	0·9	3·5	62·1	39·2	71·3	30·2	1·330	5	0·730	13	...
Kiandra	88	4640	30·126	37·7	94·0	S.E.	2·4	8·4	49·4	26·0	75·7	7·3	5·790	16	1·160	7	...
Cooma	52	2637	...	46·1	...	S.	1·6	7·2	57 0	35·2	66·6	23·8	3·510	9	1·210	6	0·541
Albury.....	175	572	30·143	50·8	87·0	N.E.	0·6	6·8	62·8	38·8	70·4	28 3	3·760	10	0·900	13	...
Eden.....	0	107	30·116	55·8	86·0	S.W.	1·3	5·2	60·7	50·9	66·0	45·1	7·150	11	3·750	6	...

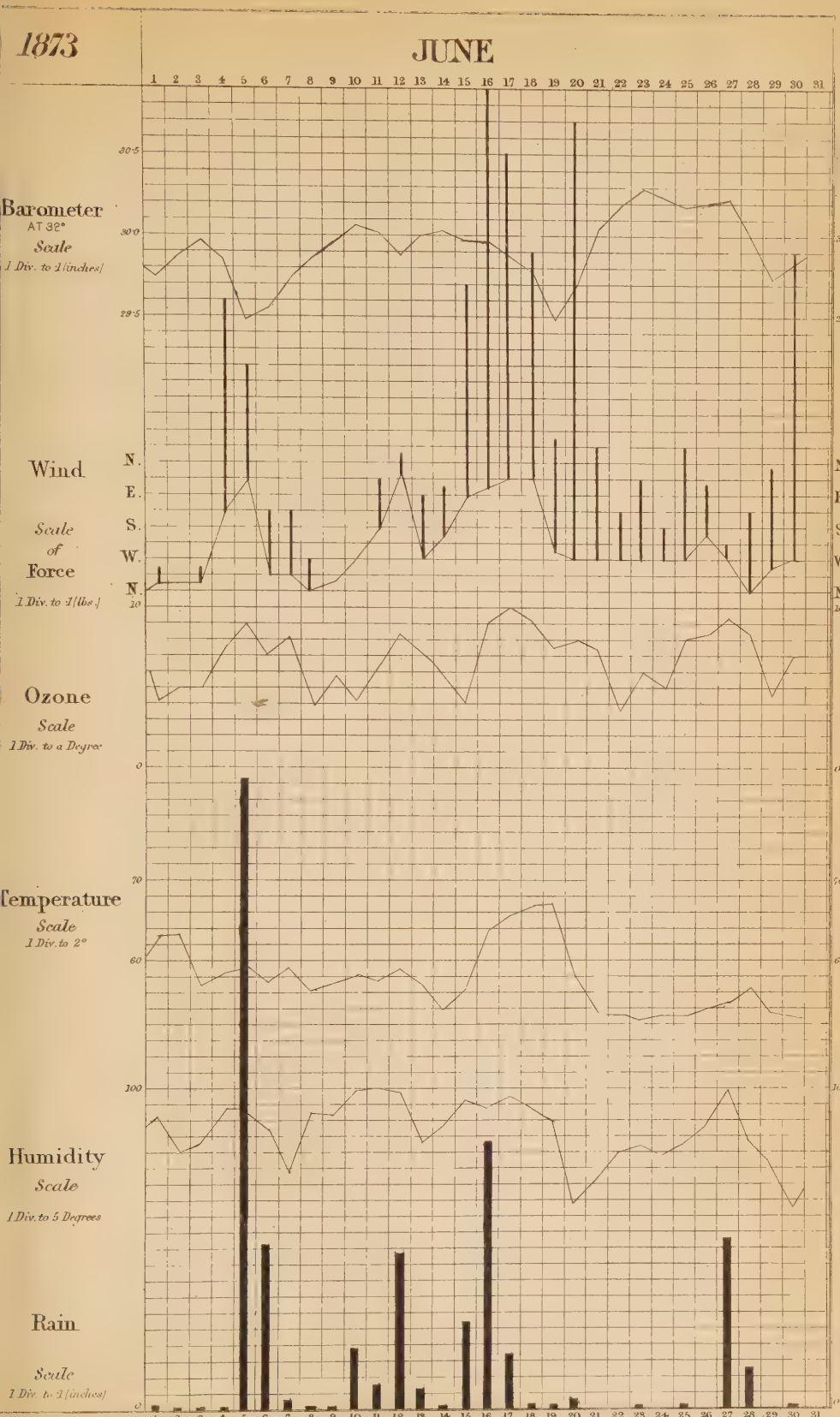
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Thunderstorm, 4th, & frosty, 22nd & 24th.
Grafton—Heavy rain, 16th.
Bourke—Foggy, 2nd; River Darling in high flood.
Narrabri—Frosty, 21st to 25th, and foggy, 30th.
Armidale—Foggy, 25th.
Port Macquarie—Thunderstorm, 5th, and squally, 26th.
Murrurundi—Frosty, 22nd and 23rd.
Cassilis—Heavy rain and strong gale, S.E., 16th, and foggy, 27th.
Muswellbrook—Foggy, 3rd, 25th, and 28th.
Dubbo—Weather very unsettled during month.
Mudgee—Foggy, 2nd, 3rd, and 24th.
West Maitland—River up 2 feet, 6th; 20 feet, 13th; and 21 feet, 16th; frosty, 23rd and 24th.
Lambton—Lightning, 29th.
Newcastle—Stormy, 16th and 17th; S.E. swell, 21st.
Orange—Foggy and frosty during month.
Bathurst—Foggy, 1st, 2nd, 3rd, and 24th; sharp frost, 25th, 26th, and 27th; strong Southerly wind, 30th.
Forbes—Foggy and raining during month.
Kurrajong—Thunderstorms, 5th and 6th; frost, 30th; squally during mouth.
Mount Victoria—Stormy, 7th and 30th; frosty and foggy during month.
Woodford—Foggy, 17th and 19th.
Sydney—Thunderstorms, 5th; stormy, 16th and 17th; lunar halo, 6th; lunar rings, 7th and 13th; and foggy, 8th, 11th and 12th.
Liverpool—Thunderstorm, 4th; fog, 2nd; frosty, 3rd; and excessive humidity, 15th to 19th.
Wentworth—Thunderstorm, 1st, and thick fog, 26th.
Cordeaux River—Thunderstorms, 4th, and 6th; heavy S. wind, 16th and 17th; and frost, 23rd, 24th, and 25th.
Wollongong—Lightning, E. at 7 p.m. on 18th.
Moss Vale—Ice, 24th; foggy, 27th.
Goulburn—Cold, frosty, and foggy, during month.
Wagga Wagga—Foggy during month.
Cape St. George—Heavy sea and E. gales, 5th, and 6th; confused sea, 17th; squally, 16th and 21st.
Queanbeyan—Foggy, 3rd, and frosty end of month.
Deniliquin—Frosty and foggy during month.
Kiandra—Thunderstorm, 1st; stormy, 4th; foggy and frosty during month, and snowing from 20th of month to the end.
Cooma—Very hard frost, 4th and 24th and frosty and foggy during month.
Albury—Thunderstorm, 1st; and foggy and frosty during month.
Eden—Aurora Australis, 20th; bright meteor, 22nd; fog, 18th; and gales, 5th, 16th, 19th, and 29th.

METEOROLOGICAL CURVES



METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF JULY, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[*Price 6d.*] 3u 29—73

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

JULY, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	30·262	... On the 30th, at 9 a.m.
	Lowest Reading	29·688	... On the 15th, at 2 p.m.
	Mean Height	29·967	

(Being 0·037 in. greater than that in the same month on an average of the preceding 14 years.)

WIND	Greatest Pressure... ...	20·5 lbs.	On the 15th.
	Mean Pressure	0·7 lbs.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 14 years W.N.W.)

TEMPERATURE	Highest in the Shade ...	64·5	... On the 12th.
	Lowest in the Shade ...	38·0	... On the 11th.
	Greatest Range	23·0	... On the 11th.
	Highest in the Sun ...	98·1	... On the 12th.
	Highest in Black Box with Glass Top	146·0	... On the 31st.
	Lowest on the Grass ...	28·1	... On the 7th.
	Mean Diurnal Range ...	13·6	
	Mean in the Shade ...	51·4	

(Being 1·0 less than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	On the 19th, 22nd, 23rd, 24th, 25th, and 30th.
	Least	52·0	... On the 14th.
	Mean	79·2	

(Being 6·9 greater than that of the same month on an average of the preceding 14 years.)

RAIN	Greatest Fall	2·267 inches.	On the 25th.
	Number of Days	11 rain and 6 dew.	
	Total Fall	8·762 inches.	65 ft. above the ground.
		10·879 inches.	15 inches above the ground.

(Being 7·192 inches greater than that of the same month on an average of the preceding 14 years.)

EVAPORATION	Total Amount	1·956 inch.
OZONE	Mean Amount	6·9

(Being 2·1 greater than that in the same month on an average of the preceding 12 years.

ELECTRICITY ..	Number of Days Lightning	5
CLOUDY SKY ..	Mean Amount	4·2
	Number of Clear Days ...	8
METEORS ..	Number Observed ...	2

REMARKS.

With the exception of heavy rain from 18th to 26th, the weather was fine, clear, and cold; the mean temperature being 1° below the average, and the lowest shade fell to 38·0° on the 11th, when a white frost was observed on the grass round the Observatory. Heavy rain fell generally over the Colony from 18th to 27th. 17 of the Stations had over 2 inches of rain, but all Stations north of Port Macquarie and south of Cape George, had light rainfall. At Cassilis all the creeks were flooded on 20th, and at West Maitland on 27th the river was up 27 feet. On 26th the river at Liverpool was flooded, and during the month though there was no rain at Fort Bourke, yet the river was flooded. Snow fell at Mount Victoria on 7th, 21st, and 25th. At Bathurst snow was seen on the mountains on the 21st, and at Kiandra snow fell every day except 2nd, 8th, 10th, 11th, 16th, 17th, 18th, and 21st, to end of month. Frosts were very frequent at Country Stations; and at Mount Victoria, ice ½ an inch to an inch thick was observed on 3rd, 9th, 10th, 17th, and 29th.

SYDNEY, JULY, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.		Taken at 9,3, & 9.
1		30·059	W.	245	52·6	48·0	61·0	43·6	17·4	52·3	95·0	36·1	61·6	71·3	·0	1·3
2		·086	W.	142	51·1	47·2	59·1	44·6	14·5	51·9	94·2	34·1	61·8	76·0	·0	0·0
3	In Equat. First Qr.	·183	W.	122	48·6	45·8	56·1	40·8	15·3	48·5	93·0	31·1	61·4	81·3	0·003	0·0
4		·156	W.	110	49·9	46·6	58·9	41·6	17·3	50·3	95·4	31·6	61·6	79·7	0·003	0·3
5		·126	W.	90	49·5	47·5	58·8	42·0	16·8	50·4	95·0	31·5	61·8	86·7	0·002	1·3
6		·079	W.	228	45·5	44·5	58·4	42·6	15·8	50·5	96·5	32·0	61·4	92·0	0·005	0·0
7		·058	W.	467	52·4	46·9	58·7	41·3	17·4	50·0	95·5	28·1	61·2	67·0	·0	0·0
8		·134	W.	296	52·4	48·0	59·6	45·6	14·0	52·6	93·4	36·1	61·6	72·7	·0	1·0
9		·136	W.	424	50·9	46·1	59·7	41·2	18·5	50·5	94·4	31·8	61·0	70·0	·0	3·3
10	G. S. Dec. Full Moon.	·257	W.	181	50·4	46·8	57·8	43·7	14·1	50·8	94·3	33·5	61·4	77·0	·0	0·0
11		·265	W.	207	51·4	45·3	61·0	38·0	23·0	49·5	94·0	28·9	61·2	63·7	0·003	9·7
12	Perigee.	·025	W.	261	54·9	47·9	64·5	42·1	22·4	53·3	98·1	30·2	60·6	60·7	·0	0·3
13		·059	W.	285	48·0	44·6	58·5	44·6	13·9	51·6	96·0	30·8	60·8	76·0	·0	0·0
14		29·991	W.N.W.	304	54·6	48·4	61·1	44·1	17·0	52·6	97·4	28·4	60·4	63·7	·0	0·0
15		·923	W.	492	57·5	51·2	64·1	48·7	15·4	56·4	98·0	32·2	60·2	64·3	·0	1·7
16	In Equat.	30·032	W.S.W.	366	50·8	44·8	58·3	44·8	13·5	51·6	95·6	34·7	60·4	63·0	0·015	1·0
17	Last Qr.	·111	W.	439	50·2	45·6	56·1	42·2	13·9	49·2	87·4	33·6	60·0	70·0	·0	4·0
18		·209	W.	323	52·0	47·5	57·9	45·2	12·7	51·6	91·4	38·4	60·2	71·3	·0	5·3
19		·209	S.S.W.	339	50·7	48·9	56·1	46·1	10·0	51·1	91·0	38·0	60·0	87·3	0·049	9·0
20		·199	S.S.W.	387	47·9	47·5	56·6	47·6	9·0	52·1	77·5	43·2	59·6	97·0	1·570	10·0
21		·321	W.	308	53·3	50·8	57·3	47·1	10·2	52·2	78·8	43·6	59·8	83·7	1·873	10·0
22	G. N. Dec.	·327	W.	164	50·7	50·6	54·7	47·2	7·5	51·0	65·9	42·1	59·4	99·3	0·420	10·0
23		·230	S.	144	51·3	51·3	53·0	48·7	4·3	50·9	60·0	45·1	59·2	100·0	1·317	10·0
24	New Moon.	·183	S.S.E.	248	51·7	51·6	54·1	50·6	3·5	52·4	62·9	46·1	59·0	99·3	1·085	10·0
25		·224	S.E.	369	50·5	50·2	56·6	49·7	6·9	53·2	67·5	45·9	58·4	97·7	2·267	10·0
26		·325	S.S.E.	368	55·4	49·9	57·7	48·6	9·1	53·2	70·9	43·4	58·2	67·0	2·111	9·3
27		·223	W.	197	47·5	46·4	58·5	46·2	12·3	52·4	96·7	39·3	58·0	91·0	0·056	10·0
28	Apogee.	·154	W.	304	51·2	46·3	56·1	45·7	10·4	50·9	93·7	34·6	58·2	69·3	·0	1·0
29		·403	W.	236	48·8	45·8	56·2	40·5	15·7	48·4	91·1	32·4	57·4	78·9	·0	4·0
30	In Equat.	·447	W.	104	50·6	49·6	58·2	44·2	14·0	51·2	96·4	37·1	57·0	92·7	0·090	6·7
31		·434	W.N.W.	142	51·6	49·6	59·1	42·4	16·7	50·8	96·7	34·9	57·2	86·7	0·010	0·0
Means	.....	30·180	W.	8292	51·1	47·8	58·2	44·6	13·6	51·4	88·8	35·8	60·0	79·2	Sum. 10·879	4·2

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·025 above the true mean for the day. Dew 3rd, 4th, 5th, 6th, 11th, and 31st.

SYDNEY, JULY, 1873.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·078	6·5	7·5	7·0	1.—Fine. Morning cold. Electrometer 0 to 90 in the forenoon.
2	0·035	4·0	8·0	6·0	2.—Fine. Morning and evening cold. Atmosphere very clear. Electrometer 0 to 20 during forenoon. Dew falling in the evening and hazy.
3	0·033	5·0	6·0	5·5	3.—Fine. No clouds during day. Morning cold. Electrometer 0 to 20 at 4 p.m. Evening hazy and heavy dew falling.
4	0·046	5·0	5·5	5·3	4.—Morning cloudy until after 8 a.m. Cloudy again from 7·30 p.m. until about 8·30 p.m. Evening hazy and dew falling. Lunar halo at 8·10 p.m.
5	0·025	5·5	6·5	6·0	5.—Cloudy from 11·30 a m. until after 2·30 p.m., and again after 4·30 p.m., wih thunderstorm from S.W., and heavy lightning between S. and E. Storm ended at 6·20 p.m. Electrometer 0 to 90 during storm.
6	0·064	...	...	4·3	6.—Fine in the morning, afterwards cloudy until about 3 p.m. Fresh breeze and cold.
7	0·114	7·5	7·5	7·5	7.—Fine. Cold. Strong dry breeze and very clear atmosphere. Clouds formed after 8·30 p.m.
8	0·080	5·5	8·0	6·8	8.—Fine. Cold, with strong breeze. Electrometer 0 to 90 in the afternoon.
9	0·108	7·0	8·0	7·5	9.—Cloudy between 2 p.m. and 4 p.m. Fresh breeze and cold. Lightning E. at 9 p.m., and partial lunar halo. Electrometer 0 to 90 in the afternoon.
10	0·059	2·5	8·5	5·5	10.—Fine. Cold. Fresh dry breeze and clear atmosphere. Electrometer 0 to 50 at 2·15 p.m. Evening hazy and dew falling.
11	0·086	6·0	6·0	6·0	11.—Light clouds all day and cloudy. Morning very cold; a white frost on the grass. Electrometer 0 to 75 at 3·5 p.m. Dry fresh breeze in the afternoon and evening.
12	0·114	5·5	7·0	6·3	12.—Cloudy and dull from 5 p.m to 6 p.m. Dry fresh breeze during day. Evening cold. Electrometer 0 to 55 at 3 p.m.
13	0·100	...	...	3·8	13.—Fine. Cold. Some clouds formed in the afternoon and cleared again towards evening.
14	0·108	4·5	7·0	5·8	14.—Fine. Strong dry breeze until evening. Electrometer 0 to 90 in the afternoon.
15	0·157	5·0	8·0	6·5	15.—Cloudy at 5 p.m., shower at 6·5 p.m., and clouds cleared. Strong dry breeze. Electrometer 0 to 90 at 12·59 p.m. Lightning E. at 8·55 p.m. W. gale all forenoon.
16	0·108	6·5	8·0	7·3	16.—Cloudy after 1·30 p.m. until after 2·30 p.m. Cold. Electrometer 0 to 90 during day. Lightning E. at 8·27 p.m.
17	0·124	6·0	8·0	7·0	17.—Fine for awhile about 8·45 a.m., and again about 7 p.m. S.W. gale all forenoon. Cold.
18	0·091	6·5	9·0	7·8	18.—Cloudy and fine alternately. Light rain from 8·11 p.m. to 8·17 p.m. Steady rain after 10 10 p.m. Meteor observed S.E. at 9·6 p.m., 4th magnitude, and lasted 2 seconds.
19	.....	9·0	9·5	9·3	19.—Cloudy. Rainbow S.W. and light rain 9·17 a.m., also 1·48 p.m. and 2·20 p.m.; then steadily until 8·55 p.m., when it began to rain heavily. Rained all night.
20	.....	...	...	5·0	20.—Cloudy. Rained all day, also during the night.
21	0·014	9·5	10·0	9·8	21.—Cloudy and showery, squally in the forenoon. Thunderstorm S.E. at 4·35 a.m. Lightning at 3·5 a.m. Rainbow S.W. at 9·35 a.m.
22	.....	10·0	10·0	10·0	22.—Cloudy. Showery in the forenoon. Rained steadily nearly the whole of the afternoon and evening.
23	.....	9·0	9·0	9·0	23.—Cloudy. Rained steadily until evening. Light rain dropping during the evening.
24	.....	9·0	10·0	9·5	24.—Cloudy. Rained steadily all day, also during the night.
25	.....	9·5	10·0	9·8	25.—Cloudy. Rained steadily. Very heavy rain at 3·10 p.m. with hail. The hail was irregular in shape, and very clear crystals of ice about one tenth of an inch square.
26	0·102	5·5	9·0	7·3	26.—Cloudy, dull. Evening cloudy and fine alternately. Drops of rain 3·43 p.m. and 8·48 p.m. Raining at 9·57 p.m. Strong dry breeze during day. Electrometer 0 to 90 at 8·45 p.m.
27	0·054	...	...	4·5	27.—Cloudy and showery. Morning cold. Fine for awhile at 11 a.m.
28	0·096	5·0	9·5	7·3	28.—Fine. Morning and evening cold. Fresh breeze during day. Electrometer 0 to 90 frequently during forenoon.
29	0·072	3·5	9·0	6·3	29.—Forenoon cloudy and fine alternately. Cloudy all afternoon; and evening fine. Meteor observed at 6·12 p.m., from E. to S.W., magnitude 1st, with train of sparks, and lasted 4 seconds.
30	0·038	7·0	6·0	6·5	30.—Fine from about 11 a.m. until noon, and also all evening. Dull during day. Rained after midnight. Evening hazy and dew falling.
31	0·050	8·0	6·5	7·3	31.—Fine. Morning cold. Light dew in the evening.
	Sum.				
Means	1·956	6·4	8·0	6·9	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

SYDNEY, JULY, 1873.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·845	29·891	8 a.m.	29·782	3 p.m.	...	...	...	2	22	...	...	...	...	...	...	...	...	...	...	245	10·2	0·5	2·2	W.	3·47 p.m.
2	29·903	29·971	8 a.m.	29·843	3 p.m.	...	...	...	...	24	...	...	...	...	...	...	...	...	...	...	...	142	5·9	0·2	1·1	W.	11·25 a.m.
3	29·952	30·001	10 a.m.	29·923	3 p.m.	...	...	...	...	24	...	...	...	...	...	...	...	...	...	...	...	122	5·1	0·1	0·7	W.	6·35 a.m.
4	29·910	29·969	9 a.m.	29·833	3 p.m.	...	...	...	...	24	...	...	...	...	...	...	...	...	...	...	...	110	4·6	0·1	1·0	W.	10·30 a.m.
5	29·871	29·935	9 a.m.	29·838	4 p.m.	...	...	...	3	12	8	1	...	...	...	...	...	...	...	...	...	90	3·8	0·1	0·3	W.N.W.	1·50 a.m.
6	29·888	29·923	9 & 10 p.m.	29·856	2 p.m.	...	...	...	6	18	...	...	...	...	...	...	...	...	...	...	...	228	9·5	0·5	3·6	W.	11· 3 a.m.
7	29·847	29·942	8 a.m.	29·770	2 p.m.	...	...	...	3	21	...	...	...	...	...	...	...	...	...	...	...	467	19·5	1·9	8·8	W.	1·30 p.m.
8	29·961	30·007	11 p.m.	29·930	2 p.m.	...	7	1	5	10	1	...	...	...	...	...	...	...	...	...	...	296	12·3	0·8	5·8	S.S.W.	2·17 p.m.
9	29·930	30·054	8 a.m.	29·832	2 p.m.	...	...	...	8	16	...	...	...	...	...	...	...	...	...	...	...	424	17·7	1·6	4·5	W.	11·35 a.m.
10	30·072	30·100	10 p.m.	30·047	5 a.m.	1	4	1	3	15	...	...	...	...	...	...	...	...	...	...	...	181	7·5	0·3	1·6	W.	10·40 a.m.
11	29·906	30·074	9 a.m.	29·805	5 a.m.	...	...	...	1	12	6	5	...	...	...	...	...	...	...	...	...	207	8·6	0·4	1·3	W.N.W.	9·10 p.m.
12	29·804	29·872	8 a.m.	29·708	2 & 3 p.m.	...	1	3	3	12	1	2	2	...	...	...	...	...	...	...	...	261	10·9	0·6	3·6	W.	3·25 p.m.
13	29·804	29·872	9 a.m.	29·778	4 a.m.	...	...	1	6	8	7	2	...	...	...	...	...	...	...	...	...	285	11·9	0·7	3·6	W.S.W.	6·53 p.m.
14	29·748	29·806	9 a.m.	29·713	4& 5 a.m.	...	...	...	1	5	12	5	1	...	...	...	...	...	...	...	...	304	12·7	0·8	4·5	W.	9·20 a.m.
15	29·754	29·817	7 am.	29·688	2 p.m.	...	...	...	3	19	2	...	...	...	...	...	...	...	...	...	...	492	20·5	2·1	20·5	W.	1·47 p.m.
16	29·852	29·919	8 a.m.	29·802	3 p.m.	1	1	2	16	4	...	...	...	...	...	...	...	...	...	...	...	366	15·3	1·2	3·6	W.S.W.	10·15 a.m.
17	29·954	30·017	8 a.m.	29·906	3 p.m.	...	4	5	6	9	...	...	...	...	...	...	...	...	...	...	...	439	18·3	1·7	6·5	S.W.	1·15 p.m.
18	29·978	30·022	9 a.m.	29·950	3 p.m.	...	5	5	5	9	...	...	...	...	...	...	...	...	...	...	...	323	13·5	0·9	2·2	S.S.W.	11·40 a.m.
19	29·980	30·020	9 a.m.	29·964	5 p.m., 1, 2 & 3 a.m.	...	9	5	6	4	...	...	...	...	...	...	...	...	...	...	...	339	14·1	1·0	5·1	S.W.	7· 0 a.m.
20	30·041	30·123	8 a.m.	29·995	1 p.m.	1	6	4	3	5	...	...	...	...	...	...	...	...	1	4	...	387	16·1	1·3	8·4	S.E.	4·55 a.m.
21	30·127	30·156	9 p.m.	30·097	2 p.m.	5	...	...	...	10	...	...	...	...	...	...	...	...	...	3	6	308	12·8	0·8	4·2	S.E.	10·15 & 11·57 a.m.
22	30·064	30·136	9 a.m.	30·008	5 a.m.	3	5	3	6	6	1	...	...	...	...	...	...	...	...	...	...	164	6·8	0·2	1·3	S.S.W.	2·40 p.m.
23	29·998	30·044	9 a.m.	29·953	4 a.m.	9	4	2	3	4	...	...	...	...	...	...	...	...	...	1	1	144	6·0	0·2	1·0	S.E.	5·37 a.m.
24	29·999	30·020	10 p.m.	29·959	3 p.m.	4	4	1	1	...	...	...	...	...	...	...	...	...	1	6	7	248	10·3	0·5	2·0	S.E.	11·15 p.m.
25	30·057	30·119	8 a.m.	30·016	3 p.m.	2	3	...	...	...	...	...	...	...	...	...	...	...	2	14	3	369	15·4	1·2	5·1	S.E.	7· 0 a.m.
26	30·095	30·137	9 a.m.	30·058	12 p.m.	2	...	...	...	4	3	...	...	...	...	...	...	...	...	1	14	368	15·3	1·2	4·2	S.S.E.	12·40 p.m.
27	29·930	30·049	10 a.m.	29·888	1 a.m.	1	1	1	4	12	3	2	...	...	...	...	...	...	...	...	...	197	8·2	0·3	2·0	W.S.W.	8·45 a.m.
28	30·063	30·199	8 a.m.	29·966	9 a.m.	6	4	...	5	9	...	...	...	...	...	...	...	...	...	...	...	304	12·7	0·8	2·9	S.	2·17 & 3·37 p.m.
29	30·218	30·257	7 & 8 a.m.	30·180	2 p.m.	...	9	...	2	13	...	...	...	...	...	...	...	...	...	...	...	236	9·8	0·5	1·4	S.S.W.	1·53 p.m.
30	30·221	30·262	9 a.m.	30·184	2 & 4 p.m.	...	...	...	1	7	6	1	1	2	6	...	...	...	...	...	...	104	4·3	0·1	0·3	W.N.W.	11·30 a.m.
31	30·199	30·250	9 a.m.	30·169	3 & 4 p.m. & 5 a.m.	...	...	...	1	3	10	...	...	1	3	4	2	...	...	...	...	142	5·9	0·2	1·1	N.E.	4·45 p.m.
Sums or Means.	29·967	July 30th, 30·262	9 a.m.	July 15th, 29·688	2 p.m.	35	67	34	103	341	60	17	5	3	9	4	2	...	4	29	31	Sum 8292	Mean. 11·1	Mean. 0·7			

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of JULY, 1873.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., July, 1873.										For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds. 0 to 10.	Temperature in Shade.				Rain.				Evaporation in inches.
						Direction	Force. 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·275	50·9	74·0	.....	...	...	61·8	40·0	68 9	36 0		No	rain		2·153
Tenterfield ...	80	...	...	46·2	..	W.	0·8	2·5	54·0	38·3	58·4	35·2	0·660	2	0·360	28	3·228
Grafton	22	...	...	53·9	...	E.S.E.	0·1	1·2	76·0	31·8	79·7	28·4	1·770	5	0·550	27	2·788
Bourke	393	...	...	47·0	...	S.	0·0	0·4	52·5	41·4	61·4	35·9	0	0	0	...	...
Narrabri	196	...	...	49·1	...	S.E.	0·7	1·8	61·4	36·7	66·9	30·5	0·110	1	0·110	27	2·253
Armidale.....	80	3278	...	48·7	78 0	E.	1·0	4·5	49·7	...	57·7	...	0·820	5	0·200	...	...
Goonoo Goonoo	110	1550	...	50·1	89·0	.....	0·3	2·7	55·3	34·9	69·0	27·9	0·500	3	0·300	24	...
Port Macquarie	0	...	...	53·0	...	S.W.	1·8	2·6	62·0	44·0	69·1	37 0	5·470	8	2·300	26	4·410
Murrurundi ...	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	45·1	...	W.	0·0	0·8	54·6	35·5	58·1	26·2	1·090	5	0·690	26	2·195
Muswellbrook..	68	...	...	47·0	...	N.	1·0	4·5	57·3	36 8	61·8	26·6	3·840	9	1·530	25	...
Dubbo	182	...	...	46·2	...	N.E.	0·5	...	55·5	36·8	59·9	30·9	0·850	3	0·350	14	1·726
Mudgee	121	...	...	43·8	...	E.	0·7	...	52·4	35·1	58·4	26·0	0·460	2	0·300	26	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	6·370	9	1·830	26	...
West Maitland	18	...	...	52·5	...	W.	1·6	3·5	61·9	43·1	69·5	34·4	7·200	8	3·000	26	3·081
Lambton	7	...	...	47·2	...	W.	1·4	...	57·2	37·2	64·3	28·0	8·660	10	1·600	20	2·278
Newcastle	1	112	30·134	51·6	78·0	N.W.	0·5	3·2	59·3	43·8	62·8	37·3	6·770	11	1·640	26	...
Orange.....	124	2891	...	39·7	...	S.	1·3	5·7	47·3	32·0	51·2	24·2	1·380	11	0·290	16	1·052
Bathurst	96	2200	30·195	41·5	85·0	W.	0·8	5·2	53·6	29·3	58·5	13·0	0·460	4	0·190	21	...
Forbes	176	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Kurrajong	36	1870	...	42·5	...	W.	...	...	48·2	36·8	55·0	31·0	3·950	7	0·930	25	...
Mount Victoria	61	3490	30·179	38·8	87·0	W.	0·0	5·0	45·9	31·6	50·1	26·8	7·580	11	2·030	26	1·519
Woodford	50	2192	30·062	45·4	...	W.	0 1	...	49·7	41·1	57·3	37·1	5·070	10	1·650	26	...
Parramatta.....	16	...	...	50·3	...	W.	1·2	2·8	63·4	37·1	68·9	29·8	7·080	4	4·500	19	...
Sydney.....	5	155	30·180	51·4	79·2	W.	0·7	4·2	58·2	44·6	64·5	38·0	10·879	11	2·267	25	1·956
Liverpool.....	16	...	30·129	46·2	...	W.	0·4	3·3	55 8	36·6	62·0	28·0	5·876	8	1·890	26	...
Wentworth.....	476	...	...	49·8	...	S.	1·2	3·2	59·1	40·4	63·4	34·3	0·320	5	0·100	5	2·167
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	3·290	7	0·920	20	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	6·910	9	1·830	21	...
Young	140	...	...	44·7	...	W.S.W.	0·0	0·3	55·6	33·8	65·0	25·1	1·380	8	0·770	1	1 932
Wollongong ...	0	...	...	51·1	...	S.W.	2·0	4·9	58·2	44·0	62·4	36·7	4·600	5	1·500	23	2·796
Moss Vale	31	...	...	40·6	...	W.	1·6	...	45·9	35·3	50·4	29·8	3·270	7	1·010	24	...
Goulburn.....	54	2129	30·221	45·1	96·0	W.	0·0	4·5	56·8	33·4	67·1	23·1	1·120	8	0·350	25	2·209
Terara	4	...	...	...	...	W.	2·6	...	...	...	...	...	4·410	10	1·020	24	...
Wagga Wagga	161	...	...	44·2	...	W.	0·3	...	52·8	35·6	59·1	28·0	1·110	6	0·520	6	1·927
Cape St. George	0	175	30·125	49·9	73·0	W.	1·8	5·2	56·6	43·1	62·2	38·6	4·940	10	1·310	24	...
Queanbeyan ...	60	...	...	34·6	...	N.W.	0·2	4·3	38·3	30·8	49·2	25·1	0·520	2	0·350	25	1·400
Urana	218	...	...	47·2	...	W.	0·9	3·2	59·8	34·6	65·5	29·1	0·320	3	0·220	5	1·494
Deniliquin	287	410	30·308	46·1	98·0	S.W.	1·2	2·4	59·6	32·5	64·3	26·2	0·740	8	0·250	5	...
Kiandra	88	4640	30·175	33 8	91·0	N.W.	2·0	6·7	51·4	16·1	78·2	2·3	0·100	1	0·100	16	...
Cooma	52	2637	...	40·8	...	E.	2·4	7·0	53·9	27·7	61·6	17·8	0·040	1	0·040	10	...
Albury.....	175	572	30·182	45·1	80·0	N.E.	1·1	3·7	59·0	31·2	64·9	24·3	0·540	8	0·660	7	...
Eden.....	0	107	30·151	50·1	80·0	S.W.	1·9	4·6	56·4	43·8	64·0	38·1	0·880	8	0·340	21	...

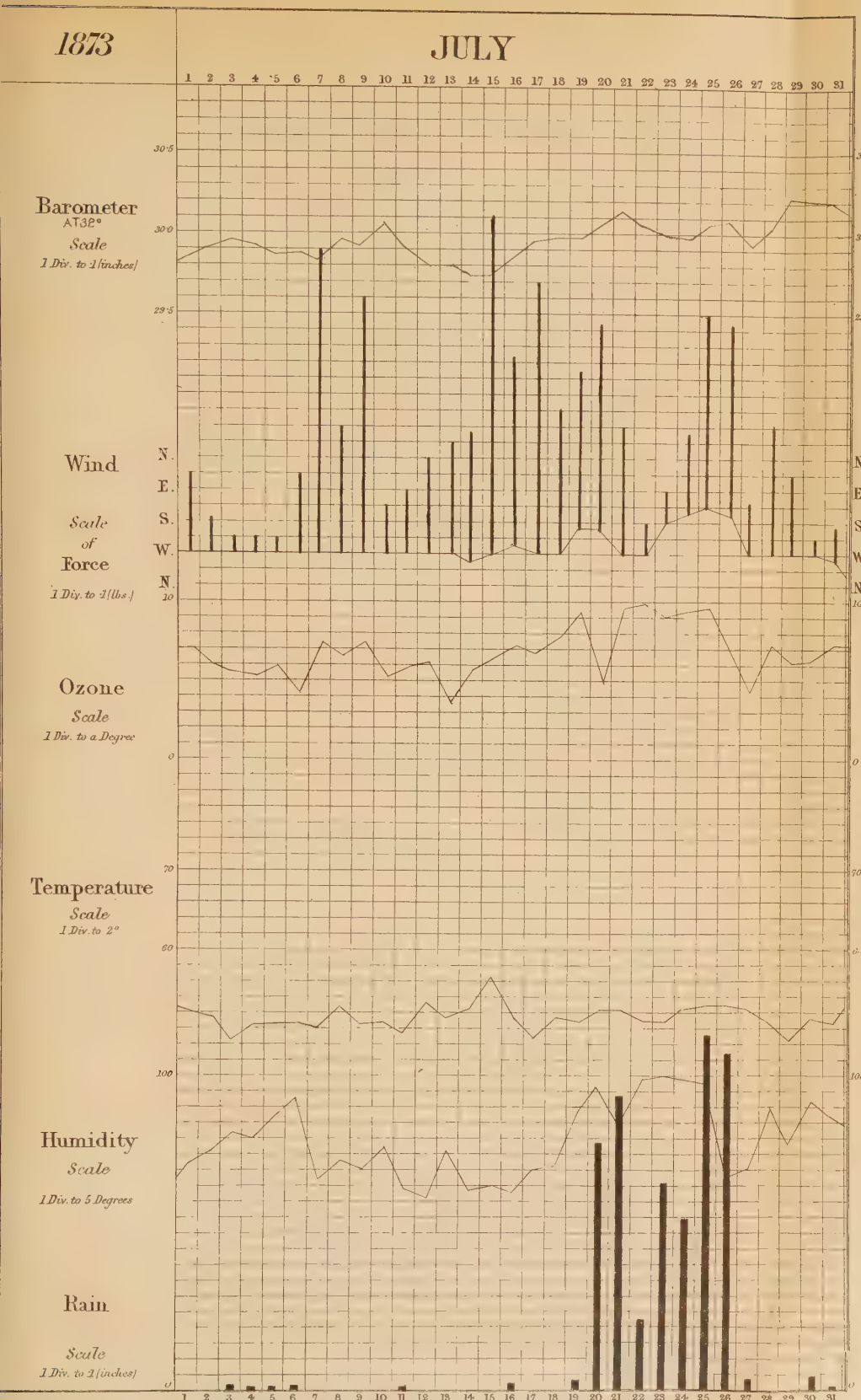
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Clear days and frosty nights.
Grafton—Foggy, 4th, 10th, and 12th.
Bourke—Heavy floods in Darling River, and feed abundant.
Narrabri—Frosty during month.
Armidale—Frosty, 4th.
Goonoo Goonoo—Heavy fog, 28th; river up 2 feet, 28th.
Port Macquarie—Thunderstorms, 21st, 22nd, and 26th.
Cassilis—Creek up on 26th.
Muswellbrook—Heavy frost, 4th; squally, 14th; and foggy, 29th and 31st.
Mudgee—Heavy frost, 3rd and 4th; frosty, 18th; and foggy, 31st.
Dalwood—Thunderstorm, 26th.
West Maitland—Heavy frost, 4th; river flooded end of month; 27 feet high, 27th.
Lambton—S. gales, 12th and 14th; large meteor, 30th; and thunder and lightning, 21st, 22nd, 25th, and 26th.
Newcastle—Heavy sea, 17th, 26th, and 29th; stormy, 21st and 26th; and dense fog, 31st.
Orange—Frosty and foggy during month.
Bathurst—Snow on mountains, 21st; and frosty during month.
Kurrajong—Squally, 14th and 24th; and frosty during month.
Mount Victoria—Ice, snow, and frost during month; stormy, 7th; and foggy, 19th and 30th.
Woodford—Foggy, 30th.
Sydney—Thunderstorms, 5th and 21st; hail, 25th; white frost, 11th.
Liverpool—Thunderstorms, 20th, 21st, and 25th; heavy squalls, 9th and 14th; flood in river on 26th, and frosty during month.
Wentworth—Squally, 5th; and frosty, 20th and 28th.
Wilton—Thunderstorm, 20th.
Cordeaux River—Thunderstorms, 5th, 17th, and 20th, with hail 25th; and frosty during month.
Moss Vale—Very cold, 7th; and foggy, 27th, 30th, and 31st.
Goulburn—Fog, 30th; and frosty during monht.
Terrara—Frost, 4th; W. gales, 14th, 15th, 16th, and very squally, 21st.
Cape St. George—Thunderstorm, 20th; heavy sea, 17th; S. gales, 16th, 17th, 18th, 19th, 20th; rain squalls, 21st and 22nd; hail storm, 15th.
Queanbeyan—Foggy, 11th and 31st; and frosty during month.
Urana—Squally, 14th and 15th; and frosty, 31st.
Deniliquin—Frosty during month.
Kiandra—Snowing heavily during the whole of month; hail storm, 5th.
Cooma—Snow, 9th and 17th; stormy, 15th; and frosty during month.
Albury—Foggy and frosty during month.
Eden—Heavy squalls, 16th (54 miles an hour); squall, 17th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney

Dew 3rd 4th 5th 6th 11th & 31st

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF AUGUST, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[Price 6d] 3u 36—73

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

AUGUST, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	30·256	... On the 10th, at 8 a.m.
	Lowest Reading	29·419	... On the 16th, at 2 p.m.
	Mean Height	29·884	

(Being 0·081 in. less than that in the same month on an average of the preceding 14 years.)

WIND	Greatest Pressure... ...	19·8 lbs.	On the 7th.
	Mean Pressure	0·7 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 14 years W.N.W.)

TEMPERATURE	Highest in the Shade ...	81·7	... On the 16th.
	Lowest in the Shade ...	43·5	... On the 11th.
	Greatest Range	29·1	... On the 16th.
	Highest in the Sun ...	113·0	... On the 29th.
	Highest in Black Box with Glass Top	179·4	... On the 29th.
	Lowest on the Grass ...	37·0	... On the 15th and 20th.
	Mean Diurnal Range ...	15·4	
	Mean in the Shade ...	56·5	

(Being 2·3 greater than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 22nd and 23rd.
	Least	44·0	... On the 16th.
	Mean	76·5	

(Being 5·0 greater than that of the same month on an average of the preceding 14 years.)

RAIN	Greatest Fall	1·020 inch.	On the 23rd.
	Number of Days	12 rain and 7 dew.	
	Total Fall	1·959 inch.	65 ft. above the ground.
		2·979 inches.	15 inches above the ground.

(Being 0·124 inch less than that of the same month on an average of the preceding 14 years.)

EVAPORATION Total Amount ... .. 2·887 inches.

OZONE	Mean Amount	6·4

(Being 1·8 greater than that in the same month on an average of the preceding 12 years.

ELECTRICITY ..	Number of Days Lightning	1
CLOUDY SKY ..	Mean Amount	5·1
	Number of Clear Days ...	5
METEORS ..	Number Observed ...	0

REMARKS.

The weather during the month was fine, with westerly wind prevalent and small rainfall; the barometer being 0·081 less than the average for the month, and within 0·001 of the average reading for August, 1872. The temperature was high in Sydney compared with the country stations, and 2·3 above the average for the month. Lunar halos were frequent, and a lunar rainbow was observed at 10 h. 45 m. p.m., of 31st. On the 16th a hot wind blew at Sydney from noon to 3 p.m., then a thunderstorm followed, during which the barograph recorded some remarkable changes of pressure. The tide-gauge also recorded some waves similar, but not so large as those of August 15th to 20th, 1868. The next morning at 4·30 a.m., some very fine meteors were observed to N.E.

At the country stations the rainfall was moderate; only two, Dubbo and Cooma, had less than one inch, and leaving out Kiandra, which is exceptional, none had more than 5·79 inches.

Frosts were observed at several of the stations, and snow fell at Kiandra on the 4th, 6th, 7th, 8th, 17th, 19th, and 20th.

SYDNEY, AUGUST, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.	Inches.	Taken at 9,3, & 9.
1		30·410	N.	214	54·9	51·8	64·1	43·6	20·5	53·9	101·0	37·3	55·6	81·3	0·002	6·0
2	First Qr.	·274	N.	367	60·1	55·3	64.4	46·8	17·6	55·6	85·7	46·9	55·4	72·0	·0	10·0
3		·211	N.W.	255	59·3	56·1	68·8	56·9	11·9	62·9	102·9	53·0	55·6	80·0	0·105	10·0
4		·213	W.N.W.	86	58·0	54·5	64·1	54·9	9·2	59·5	97·0	51·3	55·4	79·7	0·001	7·3
5		·145	N.E.	129	56·0	52·7	63·2	48·4	14·8	55·8	101·0	42·5	55·6	79·3	0·002	3·7
6	G. S. Dec.	·055	N.	295	55·0	53·7	59·8	45·7	14·1	52·8	88·5	39·0	55·4	90·3	0·001	10·0
7		29·711	W.N.W.	489	59·8	52·1	65·7	49·5	16·2	57·6	99·0	45·1	57·4	59·3	0·520	0·3
8	Full moon	·981	W.N.W.	106	55·6	51·1	62·7	49·5	13·2	56·1	96·8	39·3	58·2	72·7	·0	4·0
9	Perigee.	·965	W.	378	50·6	49·0	55·8	46·7	9·1	51·3	80·0	40·8	58·6	88·0	·0	10·0
10		30·289	W.	231	48·0	45·6	57·1	43·7	13·4	50·4	93·4	38·1	58·8	82·0	0·340	0·0
11		·438	W.N.W.	162	53·1	50·5	60·8	43·5	17·3	52·2	98·0	38·2	59·2	82·3	0·001	5·3
12	In Equat.	·290	N.W.	197	56·9	53·6	63·7	46·9	16·8	55·3	101·0	40·7	59·6	80·0	·0	10·0
13		·094	E.N.E.	117	61·7	57·5	69·4	51·4	18·0	60·4	104·3	49·1	59·4	77 0	0·019	1·3
14		29·919	W.S.W.	173	61·3	56·2	69·5	48·7	20·8	59·1	107·4	43·3	59·8	71·7	0·001	5·7
15	Last Qr.	30·052	N.	235	56·7	52·3	64·2	47·3	16·9	55·8	102·0	37·0	59·8	73·7	0·001	3·3
16		29·741	W.N.W.	455	67·3	59·2	81·7	52·6	29·1	67·2	112·8	45·5	60·2	61·7	·0	8·3
17		·858	W.	521	54·7	46·5	60·0	53·1	6·9	56·6	96·4	48·1	60·4	54·0	0·214	0·0
18		30·150	W.N.W.	149	55·5	49·5	63·1	46·7	16·4	54·9	102·6	39·6	60·0	65·0	·0	0·0
19	G. N. Dec.	·089	W.N.W.	209	56·2	50·4	65·5	44·4	21·1	55·0	101·3	37·1	60·4	67·3	0·001	0·7
20		·100	W.	133	57·2	52·0	64·5	47·6	16·9	56·1	102·5	37·0	60·2	70·7	·0	4·7
21		·310	W.N.W.	160	55·5	52·3	59·1	48·9	10·2	54·0	93·7	43·0	60 4	80·0	0·100	9·7
22		·251	S.	209	55·3	53·8	61·4	47·0	14·4	54·2	99·0	42·0	60·0	90·0	0·003	9·3
23	New Moon.	·005	W.S.W.	596	54·4	53·8	58·1	51·9	6·2	55·0	68·0	50·8	60·6	95·3	1·020	10·0
24	Apogee.	29·948	W.S.W.	360	56·0	52·3	62·3	52·8	9·5	57·6	97·8	50·0	59·8	76·0	0·604	10·0
25		30·159	S.	298	55·1	51·4	60·2	48·5	11·7	54·4	99·8	42·6	59·6	77·0	·0	0·3
26	In Equat.	·149	E.	110	54·8	51·9	63·1	45·5	17·6	54·3	104·0	40·3	59·7	81·7	·0	4·0
27		·018	W.N.W.	111	58·1	54·8	68·9	45·5	23·4	57·2	107·2	11·2	59·5	80·3	0·004	3·3
28		·145	N.W.	197	62·3	57·2	68·7	49·7	19·0	59·2	106·7	45·0	59·9	71·7	·0	0·0
29		·065	W.	151	64·3	59·5	76·1	54·2	21·9	65·2	113·0	46·5	59·7	73·3	·0	2·3
30		·095	W.	144	57·3	52·2	64·3	51·0	13·3	57·7	104·3	43·2	59·5	71·3	·0	0·0
31	First Qr.	·204	S.	251	55·3	53·4	57·4	48·5	8·9	53·0	92·0	43·6	59·7	87·0	0·040	9·0
Means	.....	30·108	W.	7488	57·0	53·0	64·1	48·8	15·4	56·5	98·7	43·1	58·8	76·5	Sum. 2·979	5·1

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·040 above the true mean for the day. Dew 1st, 5th, 6th, 11th, 14th, 19th, and 27th.

SYDNEY, AUGUST, 1873.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·062	8·0	7·0	7·5	1.—Fine until about 12·15 p.m., and again from 7 p.m. until 7·30 p.m.
2	0·049	7·5	8·5	8·0	2.—Cloudy and dull. Like thunderstorm in the forenoon. Began to rain at 6·50 p.m., and again lightly at 8·15 p.m.
3	0·089	...	...	3·3	3.—Clouds cleared in the afternoon, and formed again; fine again at 9·10 p.m. Morning dull, like rain. Lunar halos frequent during evening.
4	0·052	5·5	7·0	6·3	4.—Cloudy and fine alternately. Dropping rain between 8 a.m. and 8·45 a.m. Evening calm, and dew falling.
5	0·053	6·5	9·0	7·8	5.—Fine after 12·30 p.m. Partial clearing of clouds in the forenoon. Morning dull. Light dew in the evening.
6	0·026	9·0	9·0	9·0	6.—Cloudy, dull. Drops of rain at 3·20 p.m. Rained nearly all afternoon and evening until 7·45 p.m.
7	0·196	6·5	5·0	5·8	7.—Fine, atmosphere very dry and clear. Very stormy. Electrometer 0 to 20 in the forenoon, and 0 to 40 at 9 p.m. Clouds formed and cleared again about 5·45 p.m.
8	0·074	5·0	9·0	7·0	8.—Cloudy, clouds light, cleared about 8 p.m. Electrometer 0 to 90 in the forenoon.
9	.....	9·0	10·0	9·5	9.—Cloudy, dull. S.S.W. gale at noon. Heavy rain 12·42 p.m., and all afternoon; again lightly between 8 p.m. and 9 p.m., when it began to rain heavily.
10	0·113	...	...	4·8	10.—Very light clouds between 10 a.m. and 11·30 a.m. Morning cold. Light dew in the evening.
11	0·066	6·5	7·0	6·8	11.—Fine until 11 a.m., and again after 8·30 p.m. Fresh breeze. Morning cold.
12	0·059	6·0	7·0	6·5	12.—Cloudy, dull, like rain. Clouds cleared at 7·30 p.m. and formed again. Morning calm. Fresh breeze in evening.
13	0·089	5·0	5·5	5·3	13.—Cloudy from 9·30 a.m. until 11 a.m. Electrometer 0 to 90 at 3 p.m. Dew falling in the evening.
14	0·083	5·5	7·0	6·3	14.—Fine after 6 p.m. Dull during day. Dropping rain at 8 a.m. No clouds in the evening, and atmosphere very dry.
15	0·126	6·5	7·0	6·8	15.—Cloudy and dull from 5·30 p.m. until about 10 p.m. No clouds all forenoon and afternoon. Atmosphere dry.
16	0·217	8·5	8·5	8·5	16.—Fine from 10·15 a.m. until 2·30 p.m. Hot wind from noon until 3·15 p.m. Electrometer 0 to 90 at 3 p.m. Drops of rain 5·15 p.m. Heavy rain 5·30 p.m.
17	0·245	...	...	2·8	Thunderstorm, W., from 7·25 p.m. until 7·45 p.m. Still raining. Lightning vividly, N.N.E., during storm, and all evening.
18	0·111	6·0	8·0	7·0	17.—Fine, strong breeze, and very dry. Electrometer 0 to 60 in the afternoon. Several fine meteors seen, N.E., at 4-30 a.m.
19	0·126	3·5	7·0	5·3	18.—No clouds during day. Atmosphere very dry until evening, when light dew began to fall. Electrometer 0 to 90 at 4·45 p.m.
20	0·092	7·0	8·0	7·5	19.—Fine between 2 p.m. and 4 p.m., also all evening. Atmosphere very dry. No clouds in the evening. Clouds were light during day.
21	0·059	9·0	9·0	9·0	20.—Cloudy and fine alternately. Rainbow, S.E., at 3·37 p.m., and light shower. Heavy shower at 6·47 p.m. Fresh breeze.
22	.....	8·5	9·5	9·0	21.—Fine from 5·15 p.m. until 8·45 p.m. Dropping rain 12·55 p.m., and again between 1 p.m. and 2 p.m. Dull during day, and fresh breeze.
23	0·092	9·0	9·5	9·3	22.—Cloudy and very dull. Steady rain all evening, from 4·15 p.m. Rained during night.
24	0·116	...	...	3·5	23.—Cloudy, stormy, and raining during day.
25	0·132	6·0	8·0	7·0	24.—Fine from 12·45 p.m. until 1·15 p.m.; final clearing after 6 p.m. Strong breeze and dull, with partial clearing of clouds during forenoon.
26	0·090	4·0	8·0	6·0	25.—Fine, fresh breeze until evening. Cloudy at noon for a while. Light dew in the evening.
27	0·100	3·0	6·0	4·5	26.—Fine until 2·30 p.m., also all evening. Evening hazy and dew falling, also calm.
28	0·132	3·0	3·0	3·0	27.—Cloudy from 11 a.m. until 4·45 p.m. Dew falling in the evening.
29	0·114	2·5	8·5	5·5	28.—Fine. No clouds during day. Fresh breeze. Atmosphere very dry and clear in the evening.
30	0·108	5·0	8·0	6·5	29.—Cloudy from 2·30 p.m. until after 4 p.m. Warm. Like thunderstorm at 3 p.m., and very dry. Evening hazy, and heavy dew falling.
31	0·016	...	...	4·5	30.—Fine. Warm. Atmosphere very dry. Evening hazy, and heavy dew falling.
					31.—Cloudy. Southerly wind with thick rain from 9·15 a.m. until the afternoon. Light showers in the evening. Lunar rainbow at 10·45 p.m.
	Sum.				
Means	2·887	6·2	7·7	6·4	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																			
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.
1	30·110	30·220	9 a.m.	30·062	6 a.m.	...	...	...	...	1	3	...	3	9	7	1	...	...	...	...	...	214	8·9	0·4	2·2 N. 8·15 p.m.
2	30·029	30·093	10 a.m.	29·986	1 & 2 p.m.	...	...	...	...	...	...	...	2	21	1	...	...	...	...	...	...	367	15·3	1·2	2·9 N. 1·52 p.m.
3	29·981	30·028	9 a.m.	29·943	3 p.m.	...	...	4	1	5	1	8	1	4	...	...	...	...	...	...	...	255	10·6	0·6	3·6 N. 10·12 a.m.
4	29·951	30·033	9 a.m.	29·919	3 & 4 p.m.	...	...	...	...	11	13	...	...	...	...	...	...	...	...	...	...	86	3·6	0·1	0·3 W.N.W. 4·20 a.m.
5	29·879	29·961	9 a.m.	29·829	6 a.m.	...	...	...	...	7	5	3	...	2	...	7	...	...	...	...	...	129	5·4	0·1	0·5 W. 8·50 a.m.
6	29·615	29·872	9 a.m.	29·484	2 a.m.	...	...	1	...	4	...	1	3	7	4	1	2	1	...	...	...	295	12·3	0·7	5·8 W. 2·45 a.m.
7	29·617	29·802	8 a.m.	29·447	4 p.m.	...	1	...	...	3	15	5	...	...	...	...	...	...	...	...	...	489	20·4	2·1	19·8 W.N.W. 4·17 p.m.
8	29·767	29·829	10 a.m.	29·721	4 a.m.	...	1	...	...	3	10	2	7	...	1	...	...	...	...	...	...	106	4·4	0·1	0·6 W. 8·15 a.m.
9	29·897	30·086	8 a.m.	29·756	12 noon	6	5	1	5	7	...	...	...	...	...	...	...	...	...	...	...	378	15·7	1·3	5·8 S.S.W. 2·55 p.m.
10	30·159	30·256	8 a.m.	30·069	1 p.m.	9	2	...	...	13	...	...	...	...	...	...	...	...	...	...	...	231	9·6	0·5	2·9 S. 2· 0 p.m.
11	30·154	30·255	10 a.m.	30·085	6 a.m.	...	...	...	1	9	...	...	2	3	7	2	...	...	...	...	...	162	6·7	0·2	2·0 N.N.E. 9·24 p.m.
12	29·952	30·110	9 a.m.	29·881	6 a.m.	...	...	...	...	5	...	5	4	4	3	3	...	...	...	...	...	197	8·2	0·3	2·6 N. 9·10 p.m.
13	29·817	29·913	9 a.m.	29·743	6 & 8 a.m.	...	...	...	1	3	3	...	...	5	2	3	6	1	...	...	...	117	4·9	0·1	0·7 W.N.W. 12·40 p.m.
14	29·748	29·862	8 a.m.	29·637	2 p.m.	...	...	5	7	5	3	1	2	1	...	...	...	...	...	...	...	173	7·2	0·3	2·0 W. 3·0 & 4·0 p.m.
15	29·714	29·867	9 a.m.	29·586	8 a.m.	...	...	...	1	4	...	...	...	12	4	...	3	...	...	...	...	235	9·8	0·5	3·1 N. 7· 2 a.m.
16	29·519	29·645	8 a.m.	29·419	2 p.m.	1	...	1	1	4	9	4	...	2	1	...	1	...	...	...	...	455	19·0	1·8	6·5 W. 3·50 a.m.
17	29·776	29·955	8 a.m.	29·650	3 & 4 p.m.	...	...	...	...	18	6	...	...	...	...	...	...	...	...	...	...	521	21·7	2·4	15·7 W. 2·28 a.m.
18	29·910	29·966	9 a.m.	29·866	4 & 5 a.m.	...	...	...	1	6	8	1	...	1	3	2	2	...	...	...	...	149	6·2	0·2	1·3 W. 9·27 a.m.
19	29·841	29·907	9 a.m.	29·780	3 p.m.	...	...	1	...	3	12	7	1	...	...	...	...	...	...	...	...	209	8·7	0·4	2·0 W.N.W. 4·40 a.m.
20	29·992	30·105	8 a.m.	29·890	2 p.m.	3	...	...	3	7	1	1	...	...	...	...	...	...	2	6	1	133	5·5	0·2	1·4 W. 10·43 a.m.
21	30·065	30·123	10 a.m.	30·030	4 & 5 p.m.	...	...	...	...	3	11	...	...	...	6	4	...	...	...	...	...	160	6·7	0·2	1·8 N.N.E. 8·30 p.m.
22	29·976	30·068	9 a.m.	29·855	7 & 8 a.m.	6	...	1	1	2	2	1	1	1	4	2	...	...	...	2	1	209	8·7	0·4	5·1 S. 6·30 a.m.
23	29·701	29·834	10 a.m.	29·654	5 p.m. & 3 a.m.	3	3	3	9	1	...	...	...	...	...	...	...	...	...	3	2	596	24·8	3·1	7·2 S.S.W. 4·42 & 5·25 p.m.
24	29·845	29·968	8 a.m.	29·742	1 p.m.	3	4	4	9	4	...	...	...	...	...	...	...	...	...	...	...	360	15·0	1·1	3·1 S.S.W. 11·45 a.m.
25	29·966	30·008	11 p.m.	29·929	4 p.m.	7	4	...	...	6	7	...	...	...	...	...	...	...	...	...	...	298	12·4	0·8	3·6 S. 1·53 p.m.
26	29·863	29·965	9 a.m.	29·812	5 a.m.	...	...	...	1	5	1	...	4	3	...	...	3	7	...	...	...	110	4·6	0·1	0·6 E.N.E. 2·40 p.m.
27	29·850	29·946	8 a.m.	29·777	3 p.m.	...	...	...	...	7	8	3	5	1	...	...	...	...	...	...	...	111	4·6	0·1	0·4 W. 1·50 p.m.
28	29·871	29·963	9 a.m.	29·834	4 & 5 p.m.	...	...	...	...	3	3	8	2	...	1	4	...	3	...	...	...	197	8·2	0·3	1·3 N.W. 10·30 p.m.
29	29·846	29·891	8 a.m.	29·767	3 p.m.	...	6	1	3	8	...	...	...	...	...	...	...	...	2	2	2	151	6·3	0·2	1·6 S.S.W. 11·55 p.m.
30	29·886	29·990	8 a.m.	29·799	3 p.m.	...	...	1	1	14	...	...	...	...	...	...	...	...	3	5	...	144	6·0	0·2	2·9 S.S.W. 8·45 a.m.
31	30·105	30·200	8 a.m.	30·017	9 a.m.	7	3	...	2	6	1	...	...	...	...	...	...	...	...	...	5	251	10·4	0·5	3·1 S.S.E. 10·32 a.m.
Sums or Means.	29·884	August 10th, 30·256 8 a.m.		August 16th, 29·419 2 p.m.		45	29	23	47	177	122	50	37	76	44	29	17	12	7	18	11	Sum 7488	Mean. 10·1	Mean. 0·7	

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of AUGUST, 1873.

Stations.	Least Distance from East Coast in miles.	Height abo ve sea in feet.	Mean of Observations taken at 9 a.m., August, 1873.										For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds. 0-10.	Temperature in Shade.				Rain.				Evaporation in inches.
						Direction	Force. 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·173	61·3	64·0	N.W.	...	...	71·7	50·9	83·1	41·5	1·090	3	0·620	9	3·056
Tenterfield ...	80	...	...	51·9	..	W.	0·8	...	60·0	43·8	71·1	39·0	3·090	7	0·880	9	1·553
Grafton	22	...	...	58·0	...	W.	0·0	2·0	80·9	35·1	88·7	28·9	2·060	5	1·060	23	2·759
Bourke	393	...	...	54·7	...	S.E.	0·0	0·6	64·3	45·0	85·4	31·9	...	ab	sent	...	...
Narrabri	196	...	...	57·8	...	S.W.	1·2	3·2	69·5	46·1	82·9	30·5	3·640	6	1·600	9	3·019
Armidale.....	80	3278	...	50·0	94·0	W.	1·2	5·7	57·7	...	70·2	...	1·890	11	0·400	11	1·303
Goonoo Goonoo	110	1550	...	51·3	83·0	.....	0·7	5·0	60·9	41·7	73·0	32·4	3·670	7	0·980	7	...
Port Macquarie	0	53	...	58·7	...	S.W.	1·3	3·8	67·2	50·1	80·8	42·6	3·605	9	1·450	23	4·675
Murrurundi ...	94	1545	...	51·9	...	W.	...	3·7	60·5	43·2	72·6	32·3	3·410	6	1·550	7	...
Cassilis	120	...	...	52·0	...	W.	1·0	0·0	63·1	40·8	77·1	32·2	1·630	5	0·600	7	...
Muswellbrook..	68	...	...	53·3	...	N.W.	0·8	4·1	64·4	42·1	76·9	33·6	2·690	11	1·000	7	...
Dubbo	182	...	...	53·0	...	N.E.	0·5	...	62·5	43·5	70·9	29·9	0·600	2	0·500	4	4·604
Mudgee	121	...	...	48·7	...	W.	0·0	...	57·4	39·9	68·4	33·0	2·270	6	0·830	7	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	3·180	11	1·210	23	...
West Maitland	18	...	...	55·4	...	W.	1·1	4·0	62·9	47·8	73·8	41·6	3·010	9	1·130	23	3·459
Lambton	7	...	...	52·7	...	W.	1·4	...	63·1	42·2	79·3	35·0	4·420	11	1·780	23	3·350
Newcastle	1	112	30·099	57·1	76·0	N.W.	0·3	4·1	65·3	48·8	79·8	41·8	3·030	12	1·300	23	...
Orange.....	124	2891	...	44·3	...	S.W.	1·0	4·5	53·1	35·0	63·7	28·8	5·790	14	1·900	7	...
Bathurst	96	2200	30·097	47·3	89·0	W.	0·5	4·2	62·5	32·1	70·5	22·0	2·200	6	1·020	7	...
Forbes	176	...	...	52·3	...	S.W.	0·7	2·0	66·2	38·3	73·2	31 1	meas	ure	leaks	...	...
Kurrajong	36	1870	...	48·3	...	W.	...	...	55·4	41·2	67·0	35·0	1·800	9	0·450	22	...
Mount Victoria	61	3490	30·075	45·9	84·0	W.	0·0	5·6	54·6	37·2	66·9	29·9	1·560	7	0·440	7	2·596
Woodford	50	2192	29·966	50·8	...	W.	0·0	...	55·7	45·8	67·7	41·7	2·420	7	0·960	23	...
Parramatta.....	16	...	...	56·4	...	S.W.	1·3	4·0	69·7	43·1	78·8	38·0	*0	0	0	...	...
Sydney.....	5	155	30·108	56·5	76·5	W.	0·7	5·1	64·1	48·8	81·7	43·5	2·979	12	1·020	23	2·887
Liverpool.....	16	...	30·065	51·9	...	W.	0·4	4·0	61·9	41·8	76·0	35·0	1·426	9	0·615	23	...
Wentworth.....	476	...	...	54·1	...	N.E.	1·1	5·0	63·4	44·8	72·4	35·9	1·750	11	0·750	7	2·527
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	1·110	4	0·360	7	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	2·800	7	1·490	24	...
Young	140	...	...	49·8	...	S.E.	...	0·7	63·9	35·6	70·0	27·1	2·780	8	1·100	3	1·848
Wollongong ...	0	...	...	56·5	...	S.W.	1·5	1·5	63·3	49·7	72·4	42·7	1·000	2	0·750	24	3·555
Moss Vale	31	...	...	45·2	...	W.	1·1	...	53·4	37·0	62·4	28·8	2·130	4	0·950	24	...
Goulburn.....	54	2129	30·078	47·7	91·0	N.W.	0·0	4·1	61·0	34·4	69·8	26·1	1·750	6	0·610	7	2·466
Terara	4	...	...	...	...	W.	1·6	...	...	...	...	...	2·220	6	1·400	24	...
Wagga Wagga	161	...	...	50·4	...	W.S.W.	0·2	...	59·5	41·2	69·1	34·9	2·970	9	1·210	3	3·229
Cape St. George	0	175	30·050	55·7	77·0	W.	1·4	5·1	62·0	49·3	73·2	45·6	1·840	6	1·000	24	...
Queanbeyan ...	60	...	...	39·4	...	N.W.	0·3	5·5	44·3	34·4	53·2	29·1	1·920	6	0·730	7	2·084
Urana	218	...	...	53·5	...	N.W.	1·1	4·4	64·8	42·1	73·5	34·1	2·540	7	0·900	3	1·988
Deniliquin	287	410	30·139	50·8	90·0	E.	1·3	4·7	63·9	37·7	72·3	31·2	2·310	9	0·860	2	...
Kiandra	88	4640	30·079	35·6	72·0	N.W.	1·7	6·7	49·2	22·0	61·2	7·8	7·140	8	2·250	17	...
Cooma	52	2637	...	44·6	...	E.	1·9	6·3	60·8	28·4	72·6	19·8	0·590	4	0·170	7	0·935
Albury	175	572	30·070	49·4	92·0	N.E.	1·1	7·2	63·1	35·6	72·4	27·3	3·680	12	0·980	7	...
Eden.....	0	107	30·036	53·6	82·0	S.W.	1·3	5·3	60·3	46·8	66·0	42·1	1·660	9	0·700	24	...

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

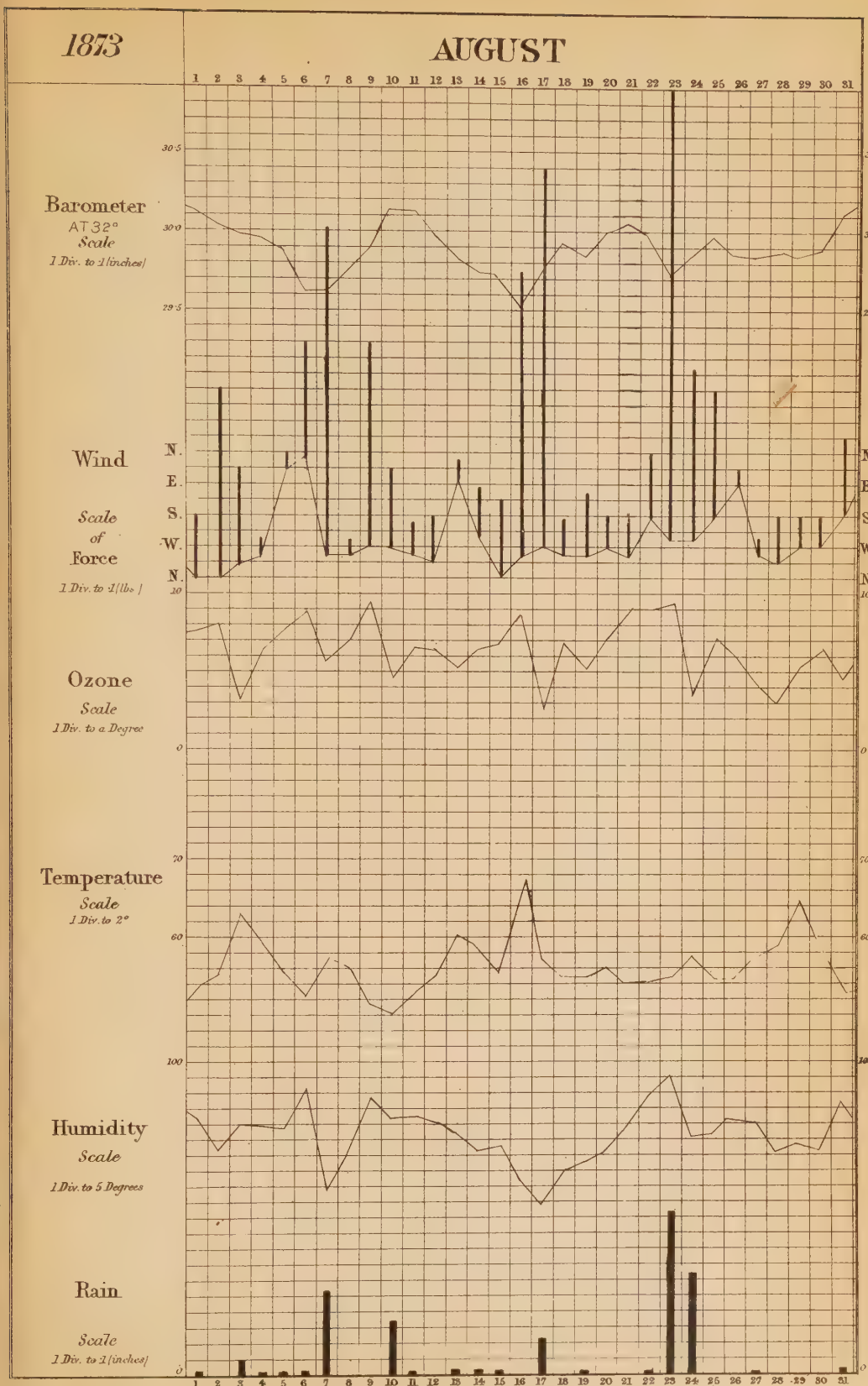
* Doubtful.

REMARKS.

REMARKS.

Thargomindah—Thunderstorm, 8th, & N.W. hot wind, 16th.
Bourke—Fine during month, one showery day, about 6th. Heat very great during last week of month.
Narrabri—Stormy, 4th and 6th. Frosty, 18th, 19th, and 20th. Foggy, 24th.
Port Macquarie—Thunderstorm, 29th.
Cassilis—Thunderstorms, 6th and 29th. Hail and hot wind, 16th, and foggy, 22nd.
Muswellbrook—Thunderstorms, 16th and 29th, and foggy, 5th, 6th, and 12th.
Mudgee—Foggy, 15th.
West Maitland—River up 15 feet, 9th. Strong hot wind, 18th.
Lambton—Thunder, 11th, 14th, and 16th.
Newcastle—Stormy, 9th, 23rd. Heavy sea, 25th.
Orange—Foggy, 25th, and frosty during month.
Bathurst—Thunderstorm, 6th. Sharp frost, 15th and 21st. W. gale, 16th.
Forbes—Dense fog, 4th. Thunderstorm, 6th. Frosty, 7th and 15th.
Kurrajong—High winds, 7th, 15th, and 16th. Frost, 14th and 25th.
Mount Victoria—Stormy, 7th, 17th, and 29th. Thunderstorm, 6th. Foggy, 4th, and frosty, 26th.
Woodford—Thunderstorm, 16th.
Parramatta—W. gale, 17th.
Sydney—Lunar halo, 3rd. Hot wind, N.W., 16th. Thunderstorm, 16th. Stormy, 23rd, and lunar rainbow, 31st.
Liverpool—Fog, 1st. Lunar halo, 7th. W. & S. squalls, 16th.
Wentworth—Gale, 14th. Stormy and heavy squalls, 16th.
Cordeaux River—Strong winds, 7th, 17th, and 23rd, and frosty, 9th, 10th, 11th, 12th, 19th, 20th, 26th, and 27th.
Moss Vale—Gale 7th and 17th. Hot wind, 16th, and hard frost, 11th. Bright meteor, 16th.
Goulburn—Frosty, 1st, 4th, 5th, 11th, 21st, and 22nd.
Terrara—Light W. winds and bright weather during month.
Cape St. George—Thunderstorm, 29th. S. gales and heavy sea, 23rd and 24th. W. gales, 7th, 16th, and 17th.
Queanbeyan—Frosty and foggy during month.
Urana—Strong wind blowing, 17th.
Deniliquin—Squally, 7th. Frost, 24th.
Kiandra—Snowing, 4th, 6th, 8th, 17th, 19th and 20th, and with hail, 17th and 19th. Frosty, 9th and 10th, and electric battery frozen, 22nd.
Cooma—Stormy, 2nd, and frosty and foggy during month.
Albury—Thunderstorm and hailstorm, 16th. Strong wind, 17th, and foggy during month.
Eden—Heavy sea, 23rd and 24th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office, Sydney.

Force of Wind 23rd 3. 4lbs ~~~ Dew 1st 5th 6th 11th 14th 19th & 27th

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF SEPTEMBER, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[*Price 6d.*] *3u 40—73*

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

SEPTEMBER, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.

Highest Reading	30·209	... On the 1st, at 9 and 10 a.m.
Lowest Reading	29·347	... On the 12th, at 4 p.m.
Mean Height	29·796	

(Being 0·106 in. less than that in the same month on an average of the preceding 14 years.)

WIND .. ..

Greatest Pressure... ...	18·6 lbs.	On the 14th.
Mean Pressure	0·8 lb.	
Number of Days Calm ...	0	
Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 14 years W.)

TEMPERATURE

Highest in the Shade ...	86·1	... On the 28th.
Lowest in the Shade ...	42·6	... On the 5th.
Greatest Range	29·8	... On the 28th.
Highest in the Sun ...	120·0	... On the 28th.
Highest in Black Box with Glass Top	199·5	... On the 24th.
Lowest on the Grass ...	36·0	... On the 5th.
Mean Diurnal Range ...	16·6	
Mean in the Shade ...	60·1	

(Being 1·5 greater than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..

Greatest Amount... ...	99·0	... On the 10th.
Least	36·0	... On the 15th.
Mean	68·4	

(Being 0·5 greater than that of the same month on an average of the preceding 14 years.)

RAIN .. ..

Greatest Fall	0·778 inch.	On the 10th.
Number of Days	9 rain and 7 dew.	
Total Fall	1·018 inch.	65 ft. above the ground.
	1·594 inch.	15 inches above the ground.

(Being 0·723 inch less than that of the same month on an average of the preceding 14 years.)

EVAPORATION Total Amount ... .. 4·611 inches.

OZONE .. .. Mean Amount ... ... 6·3

(Being 1·4 greater than that in the same month on an average of the preceding 12 years.

ELECTRICITY .. Number of Days Lightning 9

CLOUDY SKY ..

Mean Amount	3·9
Number of Clear Days ...	5

METEORS .. Number Observed ... 1

REMARKS.

The weather during the month was generally hot and dry with strong westerly winds; hot winds were recorded on the 12th, 18th, 19th, 20th, 21st, 28th, and 29th; the mean shade temperature was 1·5 greater than the average of the past 14 years. There were however a few cold days in the early part of the month, and on the 5th snow fell at 11 of the stations situated along the mountains, in some cases it was accompanied by hail and sleet. Snow also fell at a few places on the 4th and 6th, and at Kiandra on the 12th, 14th, 15th, 16th, and 21st. A few frosts were recorded at some of the inland stations. On the 3rd a shock of earthquake lasting 3 seconds was felt at Goulburn. 54 thunderstorms were recorded, but the rainfall was small, being less than 2 inches at 33 of the stations. Lunar halos were frequent and lunar rings were recorded on the 5th and 28th.

SYDNEY, SEPTEMBER, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water. 9 a.m.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.		Mean 9.3.9.		Taken at 9,3, & 9.
1		30·397	N.E.	55	54·2	50·8	58·2	47·3	10·9	52·8	99·0	45·2	60·1	78·7	0·190	9·7
2	G. S. Dec.	·382	N.E.	253	57·7	54·4	61·2	48·4	12·8	54·8	101·7	41·0	60·7	79·7	·0	7·0
3		·017	N.N.W.	227	57·1	55·9	63·5	53·4	10·1	58·5	94·9	44·0	60·4	91·3	0·027	10·0
4		29·632	W.	506	58·8	52·1	64·5	55·2	9·3	59·9	101·5	51·0	60·9	63·0	0·465	2·3
5		·839	W.	590	47·5	43·5	53·3	42·6	10·7	48·0	93·0	36·0	60·6	73·3	·0	4·7
6		·862	S.S.W.	530	53·8	47·9	59·1	42·9	16·2	51·0	88·9	41·0	60·5	65·0	0·075	7·0
7	Full Moon Perigee.	30·025	W.	279	52·0	45·6	60·6	44·7	15·9	52·7	98·0	40·0	59·7	61·0	·0	2·0
8	In Equat.	·094	W.N.W.	141	56·3	52·8	61·1	46·2	14·9	53·7	99·9	40·1	59·9	78·3	0·001	0·0
9		29·784	W.	222	53·7	52·1	63·4	45·2	18·2	54·3	103·6	40·0	60·1	89·3	0·002	10·0
10		·981	S.	106	56·4	54·9	61·1	49·5	11·6	55·3	97·9	46·4	60·5	90·3	0·778	7·7
11		·871	W.	177	59·1	55·6	69·6	51·0	18·6	60·3	106·1	43·4	60·7	80·7	0·003	4·3
12		·791	W.	343	62·8	56·6	74·7	50·2	24·5	62·5	101·8	40·2	60·5	67·3	0·001	2·7
13		·897	N.W.	303	66·7	55·6	75·0	50·6	24·4	62·8	110·5	39·6	60·9	48·3	0·032	6·3
14	Last Qr.	·705	W.	468	66·0	54·0	69·4	59·0	10·4	64·2	107·0	50·7	60·5	45·0	·0	0·0
15	G. N. Dec.	·929	W.S.W.	312	60·7	49·7	69·1	51·2	17·9	60·2	104·0	37·8	60·7	47·3	·0	1·3
16		·957	W.	206	60·4	52·2	68·6	49·0	19·6	58·8	107·7	39·9	60·6	56·7	·0	2·3
17		30·045	W.N.W.	160	61·0	54·6	72·1	48·0	24·1	60·1	110·5	41·3	61·1	65·3	·0	1·7
18		29·966	W.N.W.	134	67·8	58·8	77·1	51·9	25·2	64·5	112·0	45·6	60·9	57·3	·0	5·3
19		·915	S.	255	69·4	61·7	81·1	55·8	25·3	68·5	111·9	45·2	60·7	62·3	0·001	0·0
20	Apogee.	·855	W.N.W.	294	65·2	59·5	75·8	58·6	17·2	67·2	103·0	52·0	61·7	69·7	·0	6·7
21		·778	W.	324	63·6	52·7	67·2	56·6	10·6	61·9	106·6	41·8	61·7	48·0	·0	6·0
22	New Moon In Equat.	30·216	W.	149	56·7	51·1	62·2	47·5	14·7	54·9	107·0	39·4	61·5	67·3	0·001	2·0
23		·334	W.	231	60·1	55·9	64·4	46·0	18·4	55·2	104·4	41·0	61·3	74·7	0·001	0·3
24		·270	W.	156	65·9	59·4	79·1	50·2	28·9	64·7	117·1	41·7	61·6	68·0	·0	3·3
25		·308	N.N.E.	289	66·4	60·5	73·6	55·4	18·2	64·5	110·0	49·0	62·1	69·0	0·001	3·0
26		·082	S.S.E.	160	65·6	59·9	73·2	61·3	11·9	67·3	112·6	50·4	62·7	69·7	·0	6·7
27		·360	N.N.E.	275	63·3	58·6	67·0	57·6	9·4	62·3	105·0	49·1	62·5	74·0	·0	0·3
28		·109	N.N.W.	522	65·3	62·0	86·1	56·3	29·8	71·2	120·0	47·2	62·7	80·0	0·001	0·0
29		29·926	E.S.E.	178	64·0	57·8	67·3	65·0	2·3	66·2	105·5	61·0	63·0	67·0	0·015	4·3
30	G. S. Dec. First Qr.	30·098	E.N.E.	158	62·6	56·0	71·1	55·2	15·9	63·2	111·0	48·5	62·7	65·7	·0	0·0
Means	.....	30 014	W.	8003	60·7	54·7	68·3	51·7	16·6	60·1	105·1	44·3	61·1	68·4	Sum. 1·594	3·9

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·038 above the true mean for the day. Dew 8th, 9th, 11th, 19th, 23rd, 25th, and 28th.

SYDNEY, SEPTEMBER, 1873.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·076	7·0	6·5	6·8	1.—Forenoon cloudy and fine alternately; rest of day dull. Evening calm.
2	0·109	5·5	8·0	6·8	2.—Forenoon cloudy and fine alternately. Afternoon and evening fine until about 8 p.m. Lunar halo at 6·47 p.m.
3	0·009	8·5	8·5	8·5	3.—Cloudy and dull. Light rain 8·20 a.m., to 8·50 a.m., and again at 11·35 a.m. Thunderstorm W., 9·15 p.m. until 10·15 p.m., with lightning and heavy rain. Electrometer 0 to 90 during storm.
4	0·262	5·0	8·5	6·8	4.—Cloudy from 9·10 a.m. until 11 a.m., and again during evening until 8·30 p.m. Strong dry breeze during day. Evening cold. Lunar halo at 9 p.m.
5	0·171	9·0	9·0	9·0	5.—Fine until 11 a.m., and again in the evening. Raining from 1·4 p.m. until 2·40 p.m. Strong cold breeze with very dry atmosphere. Luuar ring 9 p.m. 40° in diameter. Electrometer 0 to 30 during the day.
6	0·180	7·0	10·0	8·5	6.—Evening fine after 5·30 p.m. Forenoon dull. Strong dry breeze during day. Electrometer 0 to 90 in the afternoon.
7	0·139	...	...	4·5	7.—Cloudy from 9·35 a.m. until 10·30 a.m. Morning cold. Lunar halo 5·20 a.m. Light dew fell in the night.
8	0·106	6·5	7·0	6·8	8.—Fine. Several lunar halos at 11·30 p.m. Dew fell in the night.
9	0·036	8·5	9·5	9·0	9.—Cloudy and dull. Like thunderstorm N.W. at 3 p.m. Thunderstorm from 6·30 until about 8·30 p.m., with lightning all evening. Raining at 7 p.m. Electrometer 0 to 90 during the storm.
10	0·065	6·5	6·5	6·5	10.—Fine at 3·30 p.m. Forenoon dull, with partial clearing of clouds at intervals. Light shower at 3·9 p.m. Evening calm, and heavy dew falling.
11	0·107	7·5	9·0	8·3	11.—Fine after 10·30 a.m. Morning dull. Light rain at 8·57 a.m., afterwards dropping until about 10·30 a.m. Fresh breeze in evening. Lightning S.E. and E. all evening, from 6·45 p.m. Electrometer 0 to 90 at 4·45 p m.
12	0·154	8·5	7·0	7·8	12.—Morning cloudy until after 11 a.m. Hot dry wind at 5 p.m., and part of evening. Lightning S.S.E. and S.E. at 9 p.m. Electrometer 0 to 90 at 11·7 a.m , and shower at 10·12 a.m.
13	0·264	5·0	6·5	5·8	13.—Fine until after 2·30 p.m., and again towards evening until after 8 p.m. Atmosphere very dry and warm. Electrometer 0 to 20 at 9 a.m.
14	0·302	...	...	2·5	14.—Fine, very dry. Strong gale blowing until evening. Lightning S.E. at 8·30 p.m. Electrometer steady at 90.
15	0·246	8·5	5·0	6·8	15.—Fine. Strong breeze. Atmosphere very dry all day, with electrometer at 60. No clouds since morning.
16	0·178	5·0	6·5	5·8	16.—Fine until about 2·30 p.m. Evening fine. No clouds at 9 a.m. or in evening. Heavy clouds mid-day. Atmosphere very dry.
17	0·144	5·5	6·5	6·0	17.—Light clouds from 9·10 a m., until after 1 p.m. Turned cloudy again at 5 30 p.m. until about 6·30 p.m. Atmosphere dry.
18	0·090	6·5	7·0	6·8	18.—Fine after 6 p.m. Drops of rain at 10·20 a.m. Like thunderstorm N.W. at 2 p.m. Electrometer 0 to 90 in the forenoon. Evening calm. Atmosphere very dry in the afternoon.
19	0·160	6·0	7·0	6·5	19.—Cloudy at 5·30 p.m., like thunderstorm. Cleared at 6·20 p.m. Lightning E.S.E. and S.E. during evening. Fresh breeze. Evening hazy and light dew falling.
20	0·210	5·0	7·0	6·0	20.—Fine from noon until after 2 p.m., and again after 7·30 p.m. Like thunderstorm in the afternoon. Fresh, dry breeze, in evening. Lightning N. at 6 48 p.m., and during evening.
21	0·195	...	...	3·5	21.—Cloudy and fine alternately. Shower at 5·45 p.m. S. squall at 8 15 p.m. Lightning S.E. and E. at 6·45 p.m., and during evening; N. about 10 p.m.
22	0·111	7·5	8·5	8·0	22.—Morning fine until about 8·45 a.m., and again after 1 p.m. Dry atmosphere in forenoon. Evening calm and light dew falling.
23	0·130	5·0	7·5	6·3	23.—Fine. Fresh breeze.
24	0·143	3·0	6·5	4·8	24.—Fine until 2·30 p.m., and again in the evening. Forenoon warm, with very light clouds. Electrometer 0 to 25 in the afternoon. Dew falling in the evening.
25	0·158	4·0	4·5	4·3	25.—Cloudy and fine alternately. Light clouds in forenoon. Fresh dry breeze.
26	0·078	5·0	5·5	5·3	26.—Forenoon dull. Afternoon and evening cloudy and fine alternately. Morning calm and foggy looking. S.S.E. gale at 4·5 p.m. Electrometer 0 to 90 during gale. Lightning N.E. and N.N.E. all evening, from 7·8 p.m.
27	0·141	6·5	8·0	7·3	27.—Fine. Strong dry breeze. No clouds in the evening.
28	0·347	...	...	2·8	28.—Light clouds, and cloudy all afternoon. Very hot. Strong dry breeze during day. Lunar ring all evening, 40° in diameter. Light shower in the night.
29	0·136	4·5	7·0	5·8	29.—Cloudy from 9·15 a.m. until noon. Evening cloudy and fine alternately. Calm at 9 p.m. Very light drops of rain at 10 p.m. Fresh breeze until evening.
30	0·164	5·0	7·0	6·0	30.—No clouds during day, and warm. Evening calm and dew falling. Meteor observed E. at 8·15 p.m. about 25° above horizon, 2nd magnitude, of a reddish color, and lasted two seconds.
	Sum.				
Means	4·611	6·2	7·3	6·3	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.	
1	30·167	30·209	9 & 10 a.m.	30·122	4 p.m.	...	2	1	...	3	3	...	1	3	...	11	...	...	...	...	...	55	2·3	0·0	0·2	N.E.	12·50 p.m.
2	30·018	30·204	9 a.m.	29·858	8 a.m.	...	...	...	...	1	2	1	4	4	4	7	1	...	...	...	...	253	10·5	0·6	2·0	N.E.	3·45 p.m.
3	29·693	29·840	9 a.m.	29·419	5 & 6 a.m.	...	...	...	...	...	...	...	7	4	6	7	...	...	...	...	...	227	9·5	0·5	5·4	N.N.W.	11·56 p.m.
4	29·576	29·698	10 p.m.	29·442	1 p.m.	...	...	...	4	14	5	...	1	...	...	...	...	...	...	...	...	506	21·1	2·2	12·5	W.	3·10 p.m.
5	29·624	29·652	10 a.m.	29·595	4 p.m.	...	...	...	9	14	1	...	...	...	...	...	...	...	...	...	...	590	24·6	3·0	12·5	W.S.W.	1·20 p.m.
6	29·752	29·824	8 a.m.	29·672	1 p.m.	...	9	4	5	6	...	...	...	...	...	...	...	...	...	...	...	530	22·1	2·4	17·4	S.W.	10·12 a.m.
7	29·853	29·905	8 a.m.	29·812	4 p.m.	5	4	...	1	8	5	1	...	...	...	...	...	...	...	...	...	279	11·6	0·7	3·6	S.	4· 5 p.m.
8	29·729	29·910	9 a.m.	29·617	8 a.m.	...	...	...	...	2	7	5	...	1	...	3	5	1	...	...	...	141	5·9	0·2	1·0	E.N.E.	4·25 p.m.
9	29·648	29·771	8 a.m.	29·555	3 p.m.	...	6	4	2	8	...	...	...	1	...	...	...	...	...	3	...	222	9·3	0·4	3·4	S.S.W.	7·30 p.m.
10	29·751	29·802	11 a.m.	29·688	5,6,&8 a.m.	6	2	...	3	6	...	3	1	1	...	...	...	...	...	...	2	106	4·4	0·1	1·4	S.	12·40 p.m.
11	29·635	29·700	9 p.m.	29·560	3 p.m.	5	1	3	2	11	2	...	...	...	...	...	...	...	...	...	...	177	7·4	0·3	3·1	S.	7·45 p.m.
12	29·558	29·713	8 a.m.	29·347	4 p.m.	...	4	2	...	8	...	...	...	2	4	4	...	...	...	...	...	343	14·3	1·0	8·8	W.	6·50 p.m.
13	29·574	29·713	9 a.m.	29·529	7 a.m.	...	...	...	1	3	6	7	3	3	...	1	...	...	...	...	...	303	12·6	0·8	2·9	W.N.W.	5·33 p.m.
14	29·632	29·739	8 a.m.	29·519	1 p.m.	...	...	2	4	14	4	...	...	...	...	...	...	...	...	...	...	468	19·5	1·9	18·6	W.	1· 0 p.m.
15	29·714	29·796	3 a.m.	29·640	3 p.m.	...	...	2	10	10	2	...	...	...	...	...	...	...	...	...	...	312	13·0	0·8	3·6	W.S.W.	2·50 p.m.
16	29·763	29·814	11 p.m.	29·691	2 p.m.	...	...	2	3	9	8	1	...	...	...	...	...	1	...	...	...	206	8·6	0·4	2·9	W.	1·55 p.m.
17	29·798	29·864	9 a.m.	29·734	3 p.m.	...	...	...	...	3	8	2	...	...	1	6	4	...	...	...	...	160	6·7	0·2	1·3	N.E.	4·40 p.m.
18	29·687	29·793	9 a.m.	29·617	7 p.m.	5	1	...	1	5	6	1	2	3	...	...	...	...	...	...	...	134	5·6	0·2	2·6	N.W.	6· 0 p.m.
19	29·608	29·740	9 a.m.	29·492	4 & 5 p.m.	7	1	...	3	1	1	...	...	...	...	4	3	1	3	...	...	255	10·6	0·6	5·1	S.	12·40 a.m.
20	29·555	29·676	9 a.m.	29·468	4 p.m.	...	...	1	5	3	5	4	...	...	...	1	3	2	...	...	...	294	12·3	0·7	3·9	N.W.	5·10 p.m.
21	29·794	30·012	8 a.m.	29·599	10 a.m.	...	1	3	6	14	...	...	...	...	...	...	...	...	...	...	...	324	13·5	0·9	13·5	W.S.W.	4·45 p.m.
22	30·072	30·146	8 a.m.	29·995	4 p.m.	...	...	...	1	7	4	...	1	...	...	2	4	4	...	1	...	149	6·2	0·2	1·0	S.E.	12· 5 p.m.
23	30·061	30·152	9 a.m.	30·021	3 & 5 p.m.	...	...	...	1	6	5	...	...	1	2	4	1	4	...	...	...	231	9·6	0·5	2·9	N.N.E.	9·30 p.m.
24	30·089	30·136	10 p.m.	30·025	3 p.m.	5	2	1	1	8	1	...	...	...	...	...	1	5	...	...	...	156	6·5	0·2	1·0	S.	11·57 p.m.
25	29·988	30·131	9 a.m.	29·860	4 a.m.	...	...	1	...	2	...	2	1	3	7	5	1	2	...	...	...	289	12·0	0·7	3·6	N.E.	4·30 p.m.
26	30·028	30·178	8 a.m.	29·847	3 p.m.	1	...	5	...	3	...	...	...	...	...	...	2	2	...	1	10	160	6·7	0·2	5·4	S.S E.	5· 8 p.m.
27	30·037	30·184	9 a.m.	29·953	9 a.m.	...	...	...	...	...	...	...	1	5	6	3	4	5	...	...	...	275	11·5	0·7	3·6	N.E.	8·20 p.m.
28	29·725	29·938	9 a.m.	29·572	5 a.m.	1	...	1	2	1	2	7	10	...	...	...	...	...	...	...	...	522	21·8	2·4	13·5	W.S.W.	2·15 a.m.
29	29·855	29·935	11 & 12 p.m.	29·747	9 a.m.	...	...	...	...	...	...	...	...	...	...	...	3	7	4	1		178	7·4	0·3	2·0	N.N.E.	12·30 p.m.
30	29·892	29·941	10 a.m.	29·830	4 p.m.	...	...	...	...	2	4	3	...	...	1	...	8	5	...	...	...	158	6·6	0·2	1·1	E.N.E.	12·53 p.m.
Sums or Means.	29·796	September 1st, 30·209 at 9 & 10 a.m.		September 12th, 29·347 4 p.m.		35	33	32	64	172	81	37	32	31	31	58	37	35	10	9	13	Sum 8003	Mean. 11·1	Mean. 0·8			

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of SEPTEMBER, 1873.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., September, 1873.										For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.	Temperature in Shade.				Rain.				Evaporation in inches
						Direction	Force. 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·187	67·5	47·0	S.	...	...	80·2	54·7	93 8	41·0	...	...	...	...	5·758
Tenterfield ...	80	...	...	...	..	.....	...	...	...	...	...	...	...	...	...	...	...
Grafton	22	...	...	66·4	...	.....	...	1·3	87·3	45·4	96·7	40·4	0·140	1	0·140	4	4·024
Bourke	393	...	...	59·7	...	S.S.W.	0·0	0·6	67·5	51·9	83·4	38·9	0·960	3	0·660	3	...
Narrabri	196	...	...	60·8	...	W.	1·6	1·1	73·9	47·6	91·9	32·5	0·680	3	0·610	4	4·115
Armidale.....	80	3278	...	54·4	82 0	W.	1·7	3·5	63·5	45·3	74·2	31·5	0·760	5	0·350	4	3·798
Goonoo Goonoo	110	1550	...	58·5	78·0	W.	0·7	3·4	69·6	47·4	77·0	34·9	0·350	1	0·350	12	...
Port Macquarie	0	...	...	61·6	...	S.W.	1·5	2·3	71·4	51·8	87·6	43·5	1·700	5	1·000	11	6·628
Murrurundi ...	94	1545	...	57·6	...	W.	0·6	3·1	66·8	48·3	80·0	34·8	1·500	1	1·500	4	...
Cassilis	120	...	...	56·4	...	N.W.	0·8	1·0	71·2	41·6	84·1	31·2	0·850	2	0·830	4	3·933
Muswellbrook..	68	...	...	58·9	...	W.	1·5	2·7	72·3	45·4	86·8	33·8	1·050	2	0·800	4	...
Dubbo	182	...	...	56·3	...	E.N.E.	0·3	...	67·4	45·2	81·9	34·9	0·240	3	0·100	10	6·185
Mudgee	121	1500	...	52·9	...	.....	...	...	64·4	41·4	76·4	33·0	1·910	3	1·400	4	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	0·790	3	0·660	3	...
West Maitland	18	...	...	59·0	...	W.	1·2	3·4	70·0	47·9	81·8	41·4	1·400	8	0·480	4	5·189
Lambton	7	...	...	56·1	...	W.	...	...	70·8	41·4	84·3	36·0	1·510	4	0·670	10	5·169
Newcastle	1	112	29·997	60·7	64·0	N.W.	0·2	2·3	69·5	51·8	82·3	41·3	1·620	5	0·910	10	...
Orange.....	124	2891	...	48·5	...	S.	1·4	3·2	59·5	37·5	73·4	29·0	2·120	10	1·080	4	3·225
Bathurst	96	2200	30·037	49·4	82·0	W.	1·0	3·7	64·4	34·4	79·5	27·0	1·220	6	0·800	4	...
Forbes	176	...	...	57·5	...	W.	0·9	2·9	71·8	43·1	85·2	29 1	...	...	...	...	...
Kurrajong	36	1870	...	52·8	...	W.	...	...	61·4	44·2	76·0	32·0	0·950	4	0·500	3	...
Mount Victoria	61	3490	29·974	50·6	76·0	W.	0·0	3·9	61·4	39·8	78·1	27·4	0·780	7	0·280	1& 4	5·647
Woodford	50	2192	29·897	54·7	...	W.	0·0	...	61·1	48·3	75·5	36·9	0·730	9	0·250	4	...
Parramatta.....	16	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Sydney.....	5	155	30·014	60·1	68·4	W.	0·8	3·9	68·3	51·7	86·1	42·6	1·594	9	0·778	10	4·611
Liverpool.....	16	...	29·986	55·8	...	W.	0·7	3·4	66·6	45·0	83·0	34·0	1·026	8	0·640	10	...
Wentworth.....	476	...	...	59·7	...	S.W.	1·2	5·0	71·4	47·9	95·4	36·1	0·860	7	0·380	3	5·451
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	0·430	4	0·320	4	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	1·210	8	0·490	5	...
Young	140	...	...	53·6	...	W.	0·3	...	70·8	36·3	91·0	27·1	2·550	8	1·350	4	2·826
Wollongong ...	0	...	...	59·7	...	S.W.	1·3	...	67·8	51·5	84·4	41·7	* 0	0	0	...	4·522
Moss Vale	31	...	...	50·7	...	W.	1·5	...	60·4	40·9	77·7	29·8	1·650	7	0·900	4	...
Goulburn.....	54	2129	30·034	51·9	69·0	W.	0·0	4·9	65·6	38·1	83·0	26·8	1·180	7	0·450	4	2·768
Terara	4	...	...	...	...	W.	...	...	...	...	...	...	0·770	5	0·340	10	...
Wagga Wagga	161	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cape St. George	0	175	29·955	58·0	84·0	W.	1·7	5·3	65·3	50·7	84·2	38·6	1·880	7	1·000	10	...
Queanbeyan ...	60	...	...	46·3	...	N.W.	0·7	4·1	52·3	40·3	65·2	30·1	1·860	5	1·040	4	3·948
Urana	218	...	...	57·3	...	W.S.W.	2·8	3·1	69·8	44·7	92·5	31·6	1·080	5	0·440	4	4·083
Deniliquin	287	410	30·072	54·2	81·0	S.W.	1·8	2·3	69·5	38·9	89·3	28·2	2·020	10	0·560	3	...
Kiandra	88	4640	30·020	39·9	67·0	N.W.	3·1	4·5	59·6	20·2	76·2	8·3	5·040	10	1·000	15	...
Cooma	52	2637	...	49·7	...	S.W.	2·3	5·1	65·4	34·0	79·6	22·8	1·170	8	0·310	15	2·240
Albury	175	572	30·000	53·2	80·0	W.	1·0	4·2	68·3	38·1	84·4	27·3	3·190	13	0·810	4	...
Eden.....	0	107	29·954	55·7	76·0	S.W.	1·5	5·6	63·0	48·3	83·0	41·1	2·070	10	0·710	5	...

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

* Doubtful

REMARKS.

REMARKS.

Thargomingah—Hot winds, 19th, 20th, and 21st. No rain. Dry season expected.

Bourke—Good season, plenty of grass and water. Thunderstorm, 3rd; squally, 9th; very hot, 18th and 19th.

Narrabri—Frosty, 5th and 10th; sultry, 19th.

Armidale—Heavy storm, 4th; stormy, 20th; snowing, 5th.

Goonoo Goonoo—Snow and sleet at Nundle, 5th; thunderstorm, 11th.

Port Macquarie—Thunderstorms, 10th and 26th; S. squall, 27th; sudden change of wind, 29th.

Murrurundi—Very hot, 19th.

Cassilis—Thunderstorms, 4th, 9th, and 11th; sleet, 5th, and sultry, 19th.

Muswellbrook—Very foggy, 3rd.

Mudgee—Thunderstorm, 4th; frosty, 8th; and sultry, 20th.

Dalwood—Snow, sleet, and small hail, 5th.

West Maitland—Squally, 4th; stormy, 11th; and hot, 13th, 23rd, 24th, 26th, and 27th.

Lambton—Thunder, 2nd; and lightning, 3rd, 9th, 10th, 11th, 13th, 14th, and 21st.

Newcastle—Very heavy sea, 6th, 8th, and 9th.

Orange—Snow, 5th; thunderstorm, 12th; stormy, 18th; and frosty, 8th and 23rd.

Bathurst—Thunderstorms, 3rd, 9th, and 12th; snow, 4th; very cold, 5th

Forbes—Stormy, 12th.

Kurrajong—Thunderstorms. 3rd, 5th, 9th, and 20th; frost, 4th; strong winds, 13th and 28th.

Mount Victoria—Thunderstorms, 3rd, 9th, 12th, 14th, 19th, 20th, and 21st; snow, 4th and 5th; ice, 5th; sultry, 20th; frosty, 8th; and foggy, 25th and 26th.

Woodford—Thunderstorms, 3rd and 9th; snow, 5th, and hail 9th.

Sydney—Lunar halos, 2nd, 4th, 7th, and 8th; lunar rings, 5th and 28th; hot wind, 12th; thunderstorms, 3rd, 9th, and 19th; stormy, 28th; S. squall, 21st, and S.S.E. gale, 26th.

Liverpool—Thunderstorms, 3rd and 9th; squally, 5th, 21st, and 29th; frosty, 5th; and foggy during month.

Wentworth—Foggy, 11th; cold, 5th, and hot wind, 29th.

Wilton—Thunderstorm, 9th.

Cordeaux River—Snow, 5th; frost, 6th, 7th, 22nd, and 23rd; thunder, 9th and 18th; strong W. winds, 12th, 13th, 16th, and 26th; and very hot, 28th.

Young—Thunderstorm, 29; squally, 4th and 5th; frosty, 7th and 8th.

Wollongong—Showery, 20th; hot winds, 28th.

Moss Vale—Snow, 5th, thunderstorm, 19th; and hot wind, 28th.

Goulburn—Shock of earthquake lasted 3 sec., 24th; thunderstorms, 3rd, 19th, and 20th; snowing, 5th; sharp frost, 8th.

Terara—Snow fell in district, 6th; very hot, and W. gale during night of 27th.

Cape St. George—Thunderstorm, 21st; W. gales, 4th and 14th; S. gales, 5th, 6th, 7th, and 19th; hot winds, 18th and 19th.

Queanbeyan—Snowing, 5th; thunderstorms, 3rd and 28th; and cold, 5th and 15th.

Urana—Squally, 3rd and 4th; thunder and hailstorm, 12th.

Deniliquin—Thunderstorms, 2nd and 3rd; hail, 3rd; heavy squall, 20th; and hot wind, 28th.

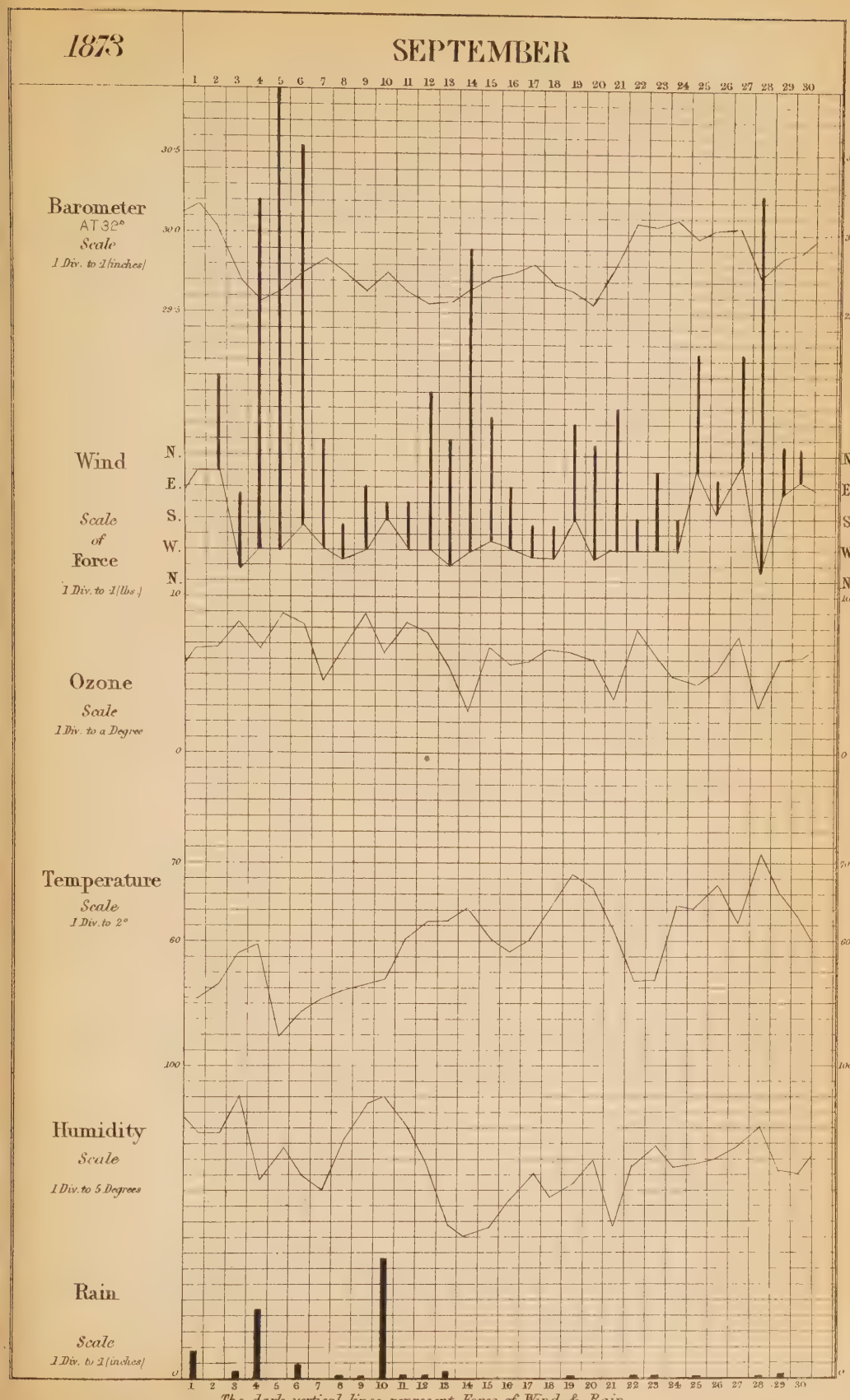
Kiandra—Snowing, 4th, 5th, 12th, 14th, 15th, 16th, and 21st; thunderstorm, 14th; and hail, 12th, 13th, and 20th.

Cooma—Stormy, 4th, 13th, 15th, and 29th; snow, 5th and 6th; and frosty during month.

Albury—Thunderstorms, 9th and 28th; and sultry, 25th and 28th.

Eden—S.W. squall 20th; and gales prevalent during month.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office, Sydney.

Force of Wind on the 5th 3.0lbs ~ Dew on the 8th 9th 11th 19th 23rd 25th & 28th

U.S.N. OBSERVATORY
APR
13
1874
WASHINGTON.

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF OCTOBER, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1873.

[Price 6d.] 3u 43—7

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

OCTOBER, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	30·158	... On the 9th, at 8 a.m.
	Lowest Reading	29·217	... On the 31st, at 7 and 8 p.m.
	Mean Height	29·829	

(Being 0·014 in. less than that in the same month on an average of the preceding 14 years.)

WIND	Greatest Pressure... ...	37·8 lbs.	On the 8th.
	Mean Pressure	0·8 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 14 years N.E.)

TEMPERATURE	Highest in the Shade ...	88·8	... On the 17th.
	Lowest in the Shade ...	48·2	... On the 5th.
	Greatest Range	30·8	... On the 17th.
	Highest in the Sun ...	124·3	... On the 17th.
	Highest in Black Box with Glass Top	205·5	... On the 28th.
	Lowest on the Grass ...	42·6	... On the 11th and 15th.
	Mean Diurnal Range ...	14·5	
	Mean in the Shade ...	63·9	

(Being 0·6 greater than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..	Greatest Amount... ...	99·0	... On the 6th.
	Least	35·0	... On the 3rd.
	Mean	70·2	

(Being 2·6 greater than that of the same month on an average of the preceding 14 years.)

RAIN	Greatest Fall	0·665 inch.	On the 12th.
	Number of Days	16 rain and 7 dew.	
	Total Fall	1·422 inch.	65 ft. above the ground.
		2·135 inches.	15 inches above the ground.

(Being 0·427 inch less than that of the same month on an average of the preceding 14 years.)

EVAPORATION	Total Amount	5·403 inches.
OZONE	Mean Amount	6·0

(Being 0·9 greater than that in the same month on an average of the preceding 13 years.

ELECTRICITY ..	Number of Days Lightning	8
CLOUDY SKY ..	Mean Amount	6·0
	Number of Clear Days ...	1
METEORS ..	Number Observed ...	0

REMARKS.

With the exception of 6 hot days the weather was cloudy, cool, and pleasant throughout the month; light rain fell on 16 days, but the total amount was less than the average for the month.
The rainfall at the country stations was likewise small, especially at those away from the coast line.
Thunderstorms were very frequent—87 are recorded.
Snow fell at Kiandra on the 7th and 13th.
A hot wind was felt at Wentworth on the 16th, and at Sydney and Cooma on the 17th.

SYDNEY, OCTOBER, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.		Taken at 9,3, & 9.
1		30·138	E.S.E.	200	62·3	58·5	67·1	51·7	15·4	59·4	100·4	45·8	62·4	77·3	0·002	10·0
2		·190	N.E.	191	63·6	60·5	67·3	59·9	7·4	63·6	108·9	56·1	62·5	81·3	0·004	9·7
3		29·885	W.	290	70·7	62·6	85·0	59·6	25·4	72·3	115·9	54·0	62·7	66·3	0·012	7·7
4		·977	S.	430	60·6	53·4	66·0	55·6	10·4	60·8	101·9	44·0	62·9	61·0	0·001	6·7
5	Perigee.	30·197	S.	138	57·5	51·5	62·2	48·2	14·0	55·2	97·1	44·0	62·7	65·0	·0	4·0
6	In Equat. / Full Moon	29·920	W.	281	58·5	57·8	62·7	52·6	10·1	57·7	91·6	47·4	62·9	95·0	0·205	6·3
7		·795	S.W.	407	58·3	54·7	63·8	52·1	11·7	58·0	88·0	49·4	62·5	78·0	0·292	10·0
8		30·128	S.S.W.	529	59·1	51·9	65·0	53·9	11·1	59·5	102·0	53·9	62·7	61·7	0·040	8·3
9		·291	S.S.W.	377	55·4	53·2	60·1	52·6	7·5	56·4	94·8	48·1	62·1	85·3	0·010	8·3
10		·322	E.N.E.	134	59·1	54·0	65·1	50·0	15·1	57·6	109·8	46 0	62 5	70·3	0·279	3·0
11		·133	E.N.E.	349	63·0	57·7	67·1	50·8	16·3	59·0	105·5	42·6	62·7	71·3	0·001	4·0
12	G. N. Dec.	29·850	W.	230	59·0	57·6	65·1	54·6	10·5	59·9	105·1	52·7	62·6	90·0	0·665	10·0
13	Last Qr.	·891	S.	465	65·2	57·5	73·3	54·2	19·1	63·8	112·1	49·0	62·9	61·7	0·002	4·0
14		30·214	E.	146	59·6	53·8	65·6	56·5	9·1	61·1	103·9	52·6	62·7	68·7	0·169	2·7
15		·200	N.N.E.	298	65·6	57·7	70·1	51·6	18·5	60·9	109·2	42·6	62·9	59·7	0·001	0·0
16		·165	N.N.E.	261	68·0	62·6	74 3	54·6	19·7	64·5	111·0	45·0	62·7	71·7	·0	0·7
17		·055	E.N.E.	251	74·4	66·4	88·8	58·0	30·8	73·4	124·3	48·5	62·9	62·3	0·001	9·7
18	Apogee.	29·941	S.E.	270	73·0	64·5	80·7	66·1	14·6	73·4	116·0	54·7	63·5	60·7	·0	6·7
19		30·190	S.S.E.	142	62·2	58·3	64·1	61·7	2·4	62·9	83·7	55·2	63·6	77·0	·0	10·0
20	In Equat.	·207	E.S.E.	102	62·6	58·0	68·6	57·6	11·0	63·1	107·0	49·6	63·4	74·0	0·010	9·7
21	New Moon	·202	N.E.	316	64·8	60·2	70·3	58·0	12·3	64·2	110·0	48·6	63·9	74·0	·0	3·3
22		·025	N.E.	460	69·6	63·7	73·1	56·9	16·2	65·0	110·3	46·0	63·6	69·7	0·001	3·3
23		29·957	S.S.E.	168	63·9	58·7	70·0	60·9	9·1	65·5	107·3	58·5	64·1	71·3	0·310	8·0
24		30·251	N.E.	268	65·9	59·5	70·1	58·5	11·6	64·3	109·4	50·3	64·3	66·0	·0	1·3
25		·061	E.N.E.	209	68·3	63·0	74·5	56·6	17·9	65·6	113·9	45·8	64·6	71·7	·0	8·0
26		29·873	N.N.W.	206	72·5	65·8	82·7	62·2	20·5	72·5	113·3	51·4	64·5	67·0	·0	10·0
27	G. S. Dec.	·798	W.	237	65·1	57·0	72·5	63·7	8·8	68·1	112·2	53·5	64·9	59·7	0·090	0·3
28		·987	W.S.W.	158	65·7	58·3	73·0	52·6	20·4	62·8	109·9	52·3	64·5	62·0	0·001	2·0
29	First Qr.	30·052	E.N.E.	289	66·9	61·6	73·3	55·7	17·6	64·5	108·9	44·6	64·7	71·7	0·001	3·7
30		29·914	N.E.	376	77·2	66·3	83·1	58·6	24·5	70·9	118·5	48·0	64·9	53·7	0·001	5·0
31		·693	N.N.W.	594	72·8	66·8	81·1	69·7	11·4	75·4	101·0	62·0	64·7	70·3	0·037	10·0
Means	.....	30·048	W.	8772	64·9	59·1	71·2	56·6	14·5	63·9	106·7	49·7	63·4	70·2	Sum. 2·135	6·0

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·043 above the true mean for the day. Heavy dew 1st, 11th, 15th, 17th, 28th, 29th, and 30th.

SYDNEY, OCTOBER, 1873.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·084	5·0	8·5	6·8	1.—Cloudy and dull, like rain; clouds light until about 9 30 a.m.
2	0·082	8·0	7·5	7·8	2.—Cloudy and dull, like rain. Light rain dropping at 8·25 a.m. and 9·2 a.m. Raining lightly at 9·18 a.m. Fresh breeze.
3	0·207	8·0	8·0	8·0	3.—Fine from 11 a.m. until noon, and again all afternoon until 7·30 p.m. Like thunderstorm 1 p.m. Showers at 1·43 p.m. and 2·5 p.m. Lightning, S.S.E., at 10 p.m.
4	0·233	5·0	6·5	5·8	Electrometer 90° during the afternoon. 4.—Afternoon fine. Evening dull. Strong S. breeze all day. Atmosphere dry.
5	0·094	...	...	4·0	5.—Fine until 9 20 a.m.
6	0·062	7·0	8·0	7·5	6.—Fine from 3·15 p.m. until 5 25 p.m. Forenoon showery. Evening cloudy and fine alternately. Dropping rain at 6·4 p.m. Lightning, N.N.E. to S.E., all evening.
7	0·110	6·5	7·0	6·8	7.—Cloudy, dull, and fresh breeze. Raining all morning until 9·45 a.m. Showers at 1·30 p.m., 2·40 p.m., and 6·15 p.m.
8	0·224	5·5	8·0	6·8	8.—Fine about 11 a.m. until 1 p m., and again from 8 p.m. until 8·20 p.m. Morning dull. S. gale all afternoon and evening. Electrometer 0 to 90 at 4 p.m.
9	0·081	8·5	9·5	9·0	9.—Morning cloudy, dull, and strong breeze. Showery during day, and partial clearing of clouds in afternoon and evening. Wind fell away in the evening,
10	0·125	5·5	8·0	6·5	10.—Fine from 1 p.m. until about 4 p.m., and again all evening from 5·30 p.m. Morning dull. Atmosphere dry in the middle of the day.
11	0·225	6·0	8·0	7·0	11.—Morning fine and warm. Like thunderstorm. S.W., at 3 p.m. Afternoon and evening cloudy and dull. Lightning, N.W. to W.S.W., all evening.
12	0·102	...	...	4·0	12.—Afternoon fine until between 7 p.m. and 8 p.m. Violent thunderstorm all morning, from 4·45 a.m. until 7·55 a.m., with lightning and very heavy rain. Forenoon showery.
13	0·287	5·0	7·0	6·0	13.—Cloudy from 11 a.m. until 2·30 p.m., and again after 8·20 p.m. Strong breeze.
14	0·127	5·0	8·0	6·5	Heavy rain, 9·14 p.m. and strong S. gale. Electrometer 0 to 35 in the afternoon.
15	0·202	7·5	6·0	6·8	14.—Fine after 1 p.m. No clouds in the evening, also calm and dew falling. Fresh breeze in the forenoon.
16	0·193	5·0	8·5	6·8	15.—Fine. Strong breeze and very dry.
17	0·238	4·5	4·5	4·5	16.—Light clouds and cloudy from noon until between 1 p.m. and 2 p.m. Morning calm, afterwards fresh breeze throughout day. Atmosphere very dry and warm.
18	0·200	5·0	8·0	6·5	17.—Light clouds and cloudy all day. Hot wind until about 1 p.m. Atmosphere very dry and hot. Electrometer 0 to 50 in the forenoon.
19	0·032	...	...	3·5	18.—Fine after 7 p.m. Heavy clouds in afternoon, like thunderstorm. Very warm and dry. Lightning, E., at 8·30 p.m., and N.N.E., at 10·15 p.m.
20	0·127	4·0	6·0	5·0	19.—Cloudy, very dull, like rain throughout day. Light rain 10·18 a.m., and 12·8 p.m., and also in the afternoon.
21	0·202	5·0	7·0	6·0	20.—Fine from 6 p.m. until 8·15 p.m. Dull during day, like rain. Evening calm, and light dew falling.
22	0·282	5·0	7·0	6·0	21.—Morning cloudy. Strong breeze during day.
23	0·146	4·0	6·0	5·0	22.—Cloudy at 7·30 p.m. Strong dry breeze during day. Thunderstorm, W., at 9·28 p.m. until about 11 p.m. Lightning vividly, W. to S.S.W., all evening. Shower at 10·25 p.m.
24	0·182	4·5	8·5	6·5	23.—Fine from 6 p.m. until about 8·30 p.m. Thunderstorm from 12·30 a.m. until about 2 a.m., with vivid lightning and heavy shower at 1·20 p.m. Fresh breeze. Dew fell in the evening.
25	0·184	4·5	5·0	4·8	24.—Fine. Dry fresh breeze all day.
26	0·128	...	...	2·5	25.—Fine after 8·30 p.m. Partial clearing of clouds at intervals during day. Fresh breeze.
27	0·225	4·0	6·5	5·3	26.—Cloudy. Very warm. Light rain 12·30 p.m., and from 2·3 p.m. until between 7 p.m. and 8 p.m.
28	0·239	4·5	6·5	5·5	27.—Fine. Strong and very dry breeze until 12·30 p.m. Light dew falling in the evening.
29	0·230	5·0	5·5	5·3	28.—Fine. Electrometer 0 to 90 at 11·45 a.m. Evening cloudy and fine alternately from 6 p.m.
30	0·321	6·5	7·0	6·8	29.—Light clouds and cloudy all evening, with lunar ring 40° diameter. Strong dry breeze.
31	0·229	...	4·5	...	30.—Forenoon cloudy and fine alternately, clouds very light. Afternoon and evening cloudy from 4 p.m. Atmosphere very hot and dry.
					31.—Cloudy and dull. Thunderstorm with lightning and rain at 1·30 a.m. Like thunderstorm during day. Dropping rain at intervals during afternoon and evening. Shower at 6·17 p.m. Very strong W. gale at 9·30 p.m.
	Sum.				
Means	5·403	5·5	7·1	6·0	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

SYDNEY, OCTOBER, 1873.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.	
1	29·960	30·006	11 p.m.	29·908	2 & 3 p.m.	2	...	...	...	...	1	...	...	...	...	...	2	3	13	2	1	200	8·3	0·4	1·0	E.S.E. 5·5 p.m.
2	29·834	30·001	9 a.m.	29·720	12 p.m. & 5 & 6 a.m.	...	...	...	...	2	2	1	2	3	2	6	5	1	...	...	...	191	8·0	0·3	2·6	E.N.E. 3·5 p.m.
3	29·646	29·775	8 a.m.	29·494	4 p.m.	6	...	...	2	7	2	1	...	...	...	...	...	3	...	...	3	290	12·1	0·7	8·4	W. 2·40 p.m.
4	29·891	30·004	8 a.m.	29·778	3 p.m.	8	5	2	2	3	...	...	...	...	...	...	...	...	...	...	4	430	17·9	1·6	5·1	S. 6·33 p.m.
5	29·845	30·015	9 a.m.	29·737	4 & 8 a.m.	3	1	...	2	...	2	1	2	1	3	...	...	2	2	3	2	138	5·8	0·2	1·0	S.S.W. 10·10 a.m.
6	29·574	29·747	9 a.m.	29·515	3 p.m.	...	1	...	2	12	...	1	1	...	2	2	1	1	...	...	1	281	11·7	0·7	4·2	W. 4·30 a.m.
7	29·749	29·922	8 a.m.	29·610	1 p.m.	...	4	9	8	3	...	...	...	...	...	...	...	...	...	...	...	407	17·0	1·4	3·9	S.W. 6·50 p.m.
8	29·995	30·113	8 a.m.	29·898	3 p.m.	7	9	4	2	..	...	...	...	...	...	...	...	...	...	...	2	529	22·1	2·1	37·8	S.S.W. 6·30 p.m.
9	30·124	30·158	8 a.m.	30·095	11 a.m.	3	9	1	1	9	...	...	...	...	...	...	...	...	...	...	1	377	15·7	1·2	7·6	S.S.W. 12·15 p.m.
10	30·025	30·138	9 a.m.	29·961	5 a.m.	2	1	...	...	...	4	5	1	...	1	2	7	...	...	1	...	134	5·6	0·2	1·1	E.N.E. 4·55 p.m.
11	29·764	29·953	9 a.m.	29·618	6 a.m.	3	1	1	1	1	...	...	...	1	2	5	9	...	...	...	...	349	14·5	1·1	5·4	W. 7·42 a.m.
12	29·710	29·745	9, 10, & 11 p.m.	29·672	9 a.m.	5	7	2	2	8	...	...	...	...	...	...	...	...	...	...	...	230	9·6	0·5	3·1	S.S.W. 3· 0 p.m.
13	29·810	29·999	8 a.m.	29·620	3 p.m.	11	...	1	7	4	...	...	...	...	...	...	...	...	...	...	1	465	19·4	1·9	14·6	W.S.W. 2·10 p.m.
14	30·029	30·053	9 p.m.	30·007	3 & 4 a.m.	...	...	...	...	...	...	...	3	...	1	...	...	8	5	2	2	146	6·1	0·2	1·6	S.S.W. 10·15 a.m.
15	29·932	30·025	9 a.m.	29·884	3 p.m.	...	...	...	...	...	...	...	2	...	10	9	3	...	...	...	...	298	12·4	0·8	5·4	N.N.E. 5·50 p.m.
16	29·974	29·988	9 a.m.	29·869	3 & 4 a.m.	...	...	...	...	...	...	...	1½	...	8	5	3	7	...	...	...	261	10·9	0·6	14·6	N.E. 6·30 p.m.
17	29·749	29·880	9 & 10 a.m.	29·700	3 p.m.	...	...	...	...	1	1	2	3	4	4	6	3	...	...	...	...	251	10·5	0·6	2·6	N. 10·50 a.m.
18	29·823	29·994	8 a.m.	29·691	3 p.m.	3	4	...	...	2	...	...	...	...	...	...	1	4	1	6	3	270	11·3	0·6	5·1	S. 10·45 p.m.
19	29·984	30·031	8 a.m.	29·948	4 a.m.	2	5	...	2	3	...	...	...	...	...	...	...	...	...	2	10	142	5·9	0·2	1·0	S.S.E. 11·20 a.m.
20	30·005	30·044	11 p.m.	29·964	4 & 5 p.m.	...	...	...	...	...	...	...	...	...	...	...	...	7	15	1	1	102	4·3	0·1	0·6	E. 1·30 p.m.
21	29·928	30·029	9 a.m.	29·877	8 a.m.	...	...	...	...	...	...	...	...	9	2	11	2	...	...	...	...	316	13·2	0·9	7·2	N.E. 3·15 p.m.
22	29·696	29·855	9 a.m.	29·619	7 p.m. & 2 p.m.	3	...	1	...	2	2	...	...	1	...	11	3	1	...	...	...	460	19·2	1·8	12·5	N.E. 4·40 p.m.
23	29·936	30·076	8 a.m.	29·787	9 a.m.	4	...	...	2	6	...	...	...	...	...	...	...	...	...	4	8	168	7·0	0·3	3·1	S.E. 1·17 p.m.
24	29·953	30·074	9 a.m.	29·879	5 a.m.	...	...	...	...	...	...	1	3	5	2	5	5	3	...	...	...	268	11·2	0·6	3·6	N.E. 10·7 p.m.
25	29·751	29·885	9 a.m.	29·678	4 a.m.	...	...	...	...	1	...	...	3	3	1	4	7	4	1	...	...	209	8·7	0·4	3·1	N.E. 5·10 p.m.
26	29·632	29·702	9 & 10 a.m.	29·577	3 a.m.	...	...	...	3	2	3	4	4	3	...	1	...	3	...	1	...	206	8·6	0·4	3·9	N.N.E. 7·43 p.m.
27	29·735	29·816	11 p.m.	29·607	10 a.m.	2	...	1	1	11	...	...	...	...	...	...	...	...	1	7	1	237	9·9	0·5	5·8	W.S.W. 10·27 a.m.
28	29·846	29·891	11 p.m.	29·784	3 p.m.	1	2	1	7	1	...	...	...	...	...	...	...	3	...	3	6	158	6·6	0·2	2·6	S.S.E. 12·0 noon
29	29·777	29·887	9 a.m.	29·733	5 p.m.	...	...	...	...	...	2	1	...	2	9	...	10	...	...	...	...	289	12·0	0·7	8·4	E.N.E. 2·45 p.m.
30	29·601	29·741	9 a.m.	29·527	6 & 7 a.m.	...	...	...	...	2	2	3	1	...	4	7	...	4	1	...	...	376	15·7	1·2	10·1	N.E. 5·55 p.m.
31	29·430	29·677	8 a.m.	29·217	7 & 8 p.m.	...	...	...	...	5	6	...	6	5	1	1	...	...	...	...	...	594	24·8	3·1	13·5	W. 10·35 p.m.
Sums or Means.	29·829	October 9th, 30·158 8 a.m.		October 31st 29·217 7 & 8 p.m.		68	49	23	44	85	27	20	32	37	52	75	61	54	39	32	46	Sum 8772	Mean. 11·8	Mean. 0·8		

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of OCTOBER, 1873.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., October, 1873.									For 24h. previous to 9 a.m.				
						Wind.			Temperature in Shade.				Rain.				Evaporation in inches.
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Direction	Force. 0-6	Clouds 0 to 10.	Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days.	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·150	77·4	42·0	E.S.E.	...	...	90·1	64 6	100 9	55·0	No	rain	fall.	...	11·340
Tenterfield ...	80	...	...	...	..	.....	...	...	...	...	...	...	...	...	...	...	...
Grafton	22	...	...	75·1	...	S.E.	0·4	3·1	93·0	57·1	99·7	43·4	0·880	3	0·400	21	2·632
Bourke	393	...	...	71·4	...	S.S.E.	0·1	1·2	...	66·0	...	50·4	0·100	1	0·100	27	...
Narrabri	196	...	...	71·3	...	N.W.	2·5	1·3	86·6	56·0	98·9	42·5	1·190	3	0·600	31	6·644
Armidale.....	80	3278	...	61·9	86 0	W.	1·3	...	71·4	52·3	80·2	41·6	1·060	5	0·470	7	3·960
Goonoo Goonoo	110	1559	...	65·4	52·0	W.	0·4	2·3	80·5	50·3	87·5	41·9	1·220	4	0·400	*	...
Port Macquarie	0	53	30·063	64·4	...	S.S.W.	1·7	2·8	72·2	56·6	78·7	48 1	1·743	10	0·560	7	5·756
Murrurundi ...	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	64·7	...	N.W.	0·6	0·6	79·1	50·3	90·1	33·2	0·620	3	0·300	7	5·349
Scone		...	...	...	...	S.W.	0·7	1·8	66·6	...	78·6	...	1·250	3	0·700	7	4·419
Muswellbrook..	68	...	...	67·4	...	W.	1·3	3·4	84·4	50·3	98·8	42·6	0·820	6	0·300	7	...
Dubbo	182	...	...	...	...	.....	...	...	...	...	..	...	...	...	...	...	...
Mudgee	121	1500	...	61·6	...	W.	1·0	...	73·5	49·6	87·4	40·0	0·890	4	0·390	23	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	1·560	10	0·310	19	...
West Maitland	18	...	...	64·0	...	S.W.	1·3	5·3	75·5	52·4	89·1	43·4	0·650	5	0·250	7	...
Lambton	7	...	...	61·2	...	W.	1·2	...	73 8	48 6	92·3	39·0	3·630	11	1·860	20	4·165
Newcastle	1	112	30·021	64·7	68·0	N.W.	0·2	4·1	72·7	56·7	92·8	48·3	3·460	14	1 880	20	...
Orange.....	124	2891	...	56·3	...	S.	1·5	4·0	67·8	44·8	81·2	35·8	1·350	7	0·410	27	3·732
Bathurst	96	2200	30·013	57·9	75·0	W.	1·3	3·1	75·3	40·4	89·5	31·0	1·210	6	0·400	13	...
Forbes	176	...	...	61·1	...	W.	0·9	2·6	76·6	45·6	88·2	38·1	0·800	14	0·100	†	...
Kurrajong	36	1870	...	57·4	...	W.	...	...	65·5	49 3	81·0	39·0	1·950	10	0·300	‡	...
Mount Victoria	61	3490	29·994	57·0	74·0	W.	0·0	5·0	69·3	44·8	88·9	34·1	0·830	7	0·200	23	3·971
Woodford	50	2192	29·941	60·3	...	W.	0 1	...	66·4	54·1	81·7	43·4	1·320	11	0·280	20	...
Parramatta.....	16	...	...	...	...	S.W.	0·4	5·1	...	52·7	...	42·2	0·350	1	0·350	7	...
Sydney.....	5	155	30·048	63·9	70·2	W.	0 8	6 0	71·2	56·6	88·8	48·2	2·135	16	0·665	12	5·403
Liverpool.....	16	...	30·028	62·2	...	S.W.	0·3	4 6	73·0	51·4	87·0	42·0	1·114	11	0·490	23	...
Wentworth.....	476	...	...	67·2	...	S.W.	1·2	5·0	80·4	54·0	99·5	45·2	0·500	5	0·210	27	3·546
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	1 070	6	0·360	11	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	2·320	10	1·170	12	...
Young	140	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Wollongong ...	0	...	...	62·9	...	N.E.	1·5	...	70·0	55·8	82·4	45·2	0·850	4	0·400	13	1·748
Moss Vale	31	...	...	58·9	...	W.	1·4	...	69·5	48·2	86·7	38·8	2·080	5	0·920	7	...
Goulburn.....	54	2129	30·039	58·7	61·0	S.	0·0	5·1	74·1	43·3	90·5	33·0	1·260	5	0·220	7	3·383
Terara	4	...	...	...	...	W.	2·2	...	...	...	...	...	1·350	8	0·830	12	...
Wagga Wagga	161	...	...	60·6	...	W.	1·1	...	70·8	50·3	89·1	41·9	0·430	2	0·330	27	4·643
Cape St. George	0	175	29·994	61·7	76·0	S.	2·3	6·3	67·9	55·4	80·2	48·6	2·230	6	1·320	7	...
Queanbeyan ...	60	...	...	54·5	...	N.W.	0·4	4·8	63·4	45·5	74·2	33·1	1·020	4	0·300	27	5·214
Urana	218	...	...	68·5	...	N.N.E.	2·0	4·0	83·0	53·9	95·5	38·6	0·350	2	0·220	31	6·762
Deniliquin	287	410	30·069	63·6	72·0	S.W.	2·3	4·5	77·3	49·9	91·3	35·2	0·730	5	0·320	13	...
Kiandra	88	4640	30·055	42·9	77·0	N.W.	3·9	4·5	64·1	21·6	73·2	7·3	3·270	10	1·100	27	...
Cooma	52	2637	...	57·2	...	N.	2·9	6·0	74·6	39·8	88·6	27·8	0·500	4	0·330	7	3 676
Albury	175	572	30·027	59·3	70·0	N.W.	0·6	4·1	77·2	41·4	90·4	29 3	0·860	7	0·380	31	..
Eden.....	0	107	29·995	61·4	70·0	N.E.	1·5	5·3	69·5	53·3	79·0	46·1	1·840	8	1·080	3	...

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

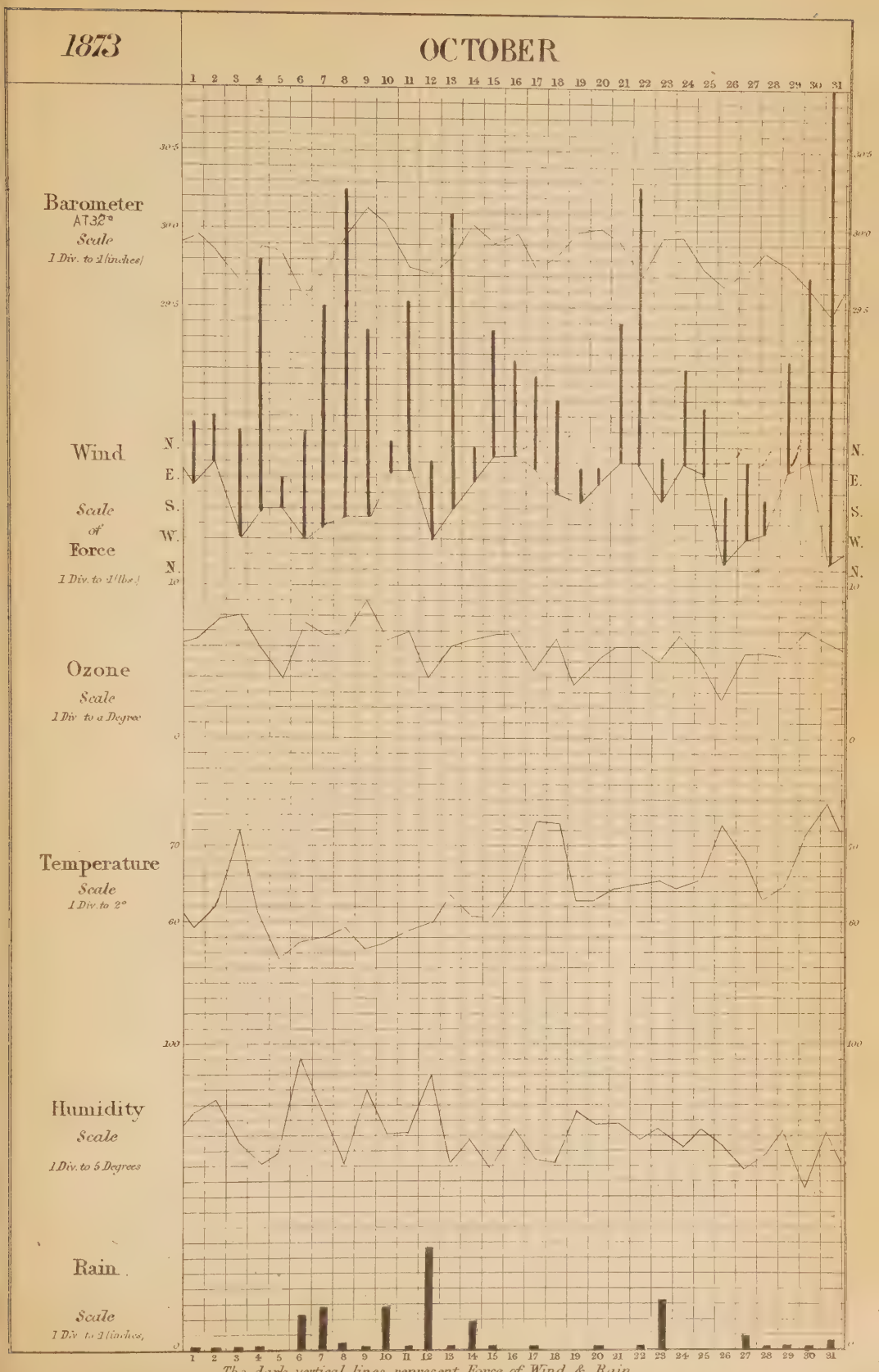
* 7th and 15th. † 5th, 7th, 12th, 26th, and 31st. ‡ 5th, 19th, and 31st.

REMARKS.

REMARKS.

Thargomingah—Thunderstorms, 5th, 18th, and 22nd. No rain; and hurricane, 31st.
Bourke—Thunderstorm, 30th; sultry during month.
Narrabri—Thunderstorm, 31st.
Armidale—Hot, 16th, 25th, 28th and 30th.
Port Macquarie—Thunderstorms, 3rd, 6th, 12th, 19th, 20th, 23rd, 26th, and 31st; and squally, 9th.
Cassilis—Thunderstorms, 3rd, 6th, 23rd, and 31st; sultry, 30th; squally, 31st.
Muswellbrook—Thunderstorms, 6th and 18th; and W. gale, 3rd.
Mudgee—Thunderstorm, 6th; stormy, 31st; and strong W. wind, 7th.
Dalwood—Thunderstorms, 3rd, 6th, 12th, 13th, 19th, 23rd, and 31st.
West Maitland—Thunderstorm, 23rd; hot, 17th and 18th; and sultry, 31st.
Lambton—Southerly burster 9th; and thunderstorm, 19th.
Newcastle—Stormy, 8th; and heavy sea, 9th.
Orange—Thunderstorms, 6th, 11th, 22nd, 30th, and 31st.
Bathurst—Thunderstorms, 6th, 11th, 22nd, 30th, and 31st.; and heavy W. gale, 31st.
Forbes—The amount of exactly 0·100 inch of rain has been measured on five days.
Kurrajong—Thunderstorms, 5th, 6th, 11th, 22nd, and 30th; violent squalls, 31st.
Mount Victoria—Thunderstorms, 5th, 6th, 7th, 12th, 19th, 22nd, 23rd, and 31st; and foggy, 1st, 2nd, and 19th.
Woodford—Thick fog, 2nd.
Parramatta—Heavy rain, 6th.
Sydney—Thunderstorms, 3rd, 12th, 22nd, 23rd, and 31st; S. gales, 8th and 13th; W. gale, 31st; and hot wind, 17th.
Liverpool—Thunderstorms, 11th, 12th, 22nd, 23rd, 30th, and 31st; squally, 8th; and foggy, 4th, 13th, and 24th.
Wentworth—Hot wind, 16th.
Wilton—Thunderstorm, 22nd and 31st.
Cordeaux River—Frost, 10th; thunder, 11th and 12th; and thunderstorm and S. squall, 23rd.
Moss Vale—Thunderstorms, 11th, 12th, 22nd, and 31st; and cold wind, 8th and 9th.
Goulburn—Thunderstorms, 11th and 22nd.
Terara—Thunderstorms, 11th, 22nd, and 31st; S. gale, 8th and 9th; very hot, 29th and 30th.
Cape St. George—Thunderstorms, 12th, 22nd, and 31st; S. and S. E. gales, early part of month.
Queanbeyan—Thunderstorm, 31st.
Urana—Squally, 25th and 31st; and cold wind, 27th.
Deniliquin—Thunderstorm, 26th.
Kiandra—Snowing, 7th and 31st; frosty, 4th, 5th, 9th, 10th, and 24th; and thunderstorms, 20th and 22nd.
Cooma—Stormy, 7th; hot winds, 17th, 23rd, and 31st; and frosty, 9th, 14th, and 15th.
Albury—Thunderstorm, 22nd; close and muggy, 29th and 30th; and heavy rain, 31st.
Eden—Thunderstorms, 2nd and 22nd; and high winds, 6th, 13th, and 30th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney.

Force of Wind 31st 3.1 lbs ~ Dew fell 1st 11th 15th 17th 28th 29th & 30th

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF NOVEMBER, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1874.

[Price 6d.] 3u 1—74

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10^h 4^m 46^s .
Magnetic Variation 9° 32′ 22″ East.

NOVEMBER, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	30·055	On the 3rd, at 7, 8, and 11 a.m., and 10 and 11 p.m.
	Lowest Reading	29·429	On the 13th, at 1 and 2 p.m.
	Mean Height	29·779	

(Being 0·063 in. less than that in the same month on an average of the preceding 14 years.)

WIND	Greatest Pressure... ...	34·4 lbs.	On the 5th.
	Mean Pressure	1·2 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	S.	

(Prevailing direction during the same month for the preceding 14 years S.)

TEMPERATURE	Highest in the Shade ...	77·8	... On the 2nd.
	Lowest in the Shade ...	50·8	... On the 7th.
	Greatest Range	18·8	... On the 13th.
	Highest in the Sun ...	119·6	... On the 2nd.
	Highest in Black Box with Glass Top	207·0	... On the 8th and 27th.
	Lowest on the Grass ...	45·3	... On the 13th and 16th.
	Mean Diurnal Range ...	12·2	
	Mean in the Shade ...	62·9	

(Being 3·5 less than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 11th and 14th.
	Least	38·0	... On the 1st.
	Mean	73·8	

(Being 4·2 greater than that of the same month on an average of the preceding 14 years.)

RAIN	Greatest Fall	3·040 inches.	On the 11th.
	Number of Days	21 rain and 1 dew.	
	Total Fall	9·447 inches.	15 inches above the ground.

(Being 6·177 inches greater than that of the same month on an average of the preceding 14 years.)

EVAPORATION	Total Amount	5·326 inches.
OZONE	Mean Amount	6·2

(Being 1·4 greater than that in the same month on an average of the preceding 13 years.

ELECTRICITY ..	Number of Days Lightning	13
CLOUDY SKY ..	Mean Amount	7·3
	Number of Clear Days ...	0
METEORS ..	Number Observed ...	1

REMARKS.

The weather during the month was remarkably cool, cloudy, and wet; the mean temperature being lower than that for any November since 1856, and 3°.5 below the average.

The rainfall generally over the Colony was large, the distant western stations being the exceptions. The total at Sydney for November has only been exceeded twice in thirty-four years, viz.: –1856, 11·130 inches; 1865, 9·880 inches; and is 6·177 inches above the average. The heaviest rain was recorded on the 11th and 12th, at which time it fell generally over the Colony, accompanied by thunder, lightning, and remarkable fluctuations of the barometer. Similar fluctuations were recorded by the barograph on the 4th, 5th, and 6th, during which days thunderstorms were recorded at twenty-six of the stations.

One hundred and sixty thunderstorms were recorded during the month.

Snow fell at Kiandra on the 1st, 6th, 9th and 10th.

On the 4th the lunar eclipse was observed at many places.

Severe hailstorms at Dalwood, on 28th; Liverpool, 28th; Woodford, 4th and 28th; Port Macquarie, 11 h.

Flood in George's River on the 11th.

Lunar haloes, 1st and 4th.

SYDNEY, NOVEMBER, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.		Taken at 9, 3, & 9.
1		29·892	W.	333	66·4	54·5	72·9	56·6	16·3	64·8	111·5	48·9	65·0	46·0	0·019	1·0
2	In Equat. Perigee.	29·997	E.N.E.	368	71·0	59·0	77·8	59·7	18·1	68·8	119·6	49·7	65·3	47·0	·0	1·0
3		30·229	N.N.E.	291	66·1	61·0	69·9	61·6	8·3	65·8	104·9	52·0	64·7	72·3	0·010	6·0
4		·231	N.E.	504	67·4	62·5	71·8	62·6	9·2	67·2	109·7	55·3	64·9	74·0	0·001	6·3
5	Full Moon	·040	N.E.	440	68·2	63·5	72·9	62·0	10·9	67·5	109·3	53·2	64·6	74·7	·0	9·3
6		29·835	W.	428	58·5	56·6	61·9	60·0	1·9	61·0	98·0	56·6	64·7	87·7	0·305	9·7
7		·856	W.	316	58·8	54·7	67·1	50·8	16·3	59·0	106·8	48·1	65·0	75·3	0·395	9·0
8		·829	E.S.E.	134	64·1	58·0	72·6	54·5	18·1	63·6	115·1	46·5	64·6	67·3	0·092	3·3
9	G. N. Dec.	·875	E.	335	65·7	59·7	69·1	58·6	10·5	63·9	108·1	51·8	64·8	68·0	0·010	9·0
10		·833	S.	425	63·0	58·7	67·7	57·7	10·0	62·7	105.1	50·7	64·6	75·7	0·340	7·3
11		·846	S.	550	57·0	55·7	63·8	54·2	9·6	59·0	86·0	50·6	64·5	91·7	3·040	10·0
12	Last Qr.	·821	S.S.W.	309	59·9	56·8	64·9	52·6	12·3	58·8	103·5	50·0	64·7	81·3	2·931	5·0
13		·660	W.	...	65·3	58·6	72·6	52·8	19·8	62·7	111·0	45·3	64·6	66·0	0·001	4·3
14	Apogee.	·910	S.	...	60·8	57·7	65·2	56·2	9·0	60·7	108·8	48·2	64·9	82·0	·0	10·0
15		30·028	W.	259	57·9	55·7	65·8	55·2	10·6	60·5	104·0	48·5	64·6	87·0	0·024	8·7
16	In Equat.	·131	E.	116	62·6	56·3	66·6	51·4	15·2	59·0	108·3	45·3	64·8	66·0	0·721	6·0
17		·029	N.W.	200	64·4	59·3	72·8	53·6	19·2	63·2	100·9	47·9	64·9	73·0	0·002	10·0
18		29·998	S.E.	...	65·0	59·6	71·2	57·7	13·5	64·5	110·5	51·1	65·1	70·7	0·010	6·3
19		30·107	S.	...	61·7	56·4	66·2	56·6	9·6	61·4	94·5	51·4	65·6	69·7	·0	6·0
20	New Moon	·188	N.E.	...	61·8	59·1	69·1	54·3	14·8	61·7	95·0	49·5	65·3	84·3	0·234	10·0
21		·052	E.N.E.	...	64·8	62·0	69·6	56·1	13·5	62·9	102·4	49·0	65·5	83·7	0·041	7·0
22		·008	S.	389	62·2	60·2	63·6	60·6	3·0	62·1	68·5	55·4	65·3	87·3	0·319	10·0
23	G. S. Dec.	29·997	S.S.W.	586	59·0	56·8	65·1	55·1	10·0	60·1	100·4	51·4	65·7	86·0	0·600	10·0
24		30·034	S.	...	62·7	56·9	67·0	54·2	12·8	60·6	106·0	48·2	65·1	69·0	·0	9·3
25		·035	S.S.E.	273	64·3	57·9	69·7	55·9	13·8	62·8	109·5	50·8	65·3	65·7	·0	7·7
26		29·989	E.S.E.	177	62·6	58·5	70·6	57·8	12·8	64·2	110·0	52·5	65·1	76·7	0·002	7·3
27	First Qr.	·975	N.E.	213	66·7	59·9	72·1	53·9	18·2	63·0	111·4	48·0	65·5	65·3	·0	5·0
28		·852	S.	278	67·3	64·4	74·1	58·8	15·3	66·5	110·5	48·3	65·7	84·3	·0	10·0
29		·806	S.	447	62·1	58·9	67·3	60·3	7·0	63·8	102·3	57·7	65·1	80·3	0·340	9·7
30	In Equat. Perigee	30·063	S.	479	66·7	58·0	68·1	61·1	7·0	64·6	104·0	54·1	65·5	57·0	0·010	4·0
Means	.....	29·972	S.	7850	63·5	58·6	69·0	56·8	12·2	62·9	104·5	50·5	65·0	73·8	Sum. 9·447	7·3

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·033 above the true mean for the day. Dew 13th;

SYDNEY, NOVEMBER, 1873.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·380	4·0	7·0	5·5	1.—Fine. Fresh breeze and very dry. Electrometer 0 to 50 at 3·15 p.m. Lunar halo at 9 p.m.
2	0·270	...	...	3·0	2.—Very warm. Evening cloudy from 6·30 p.m. S. gale at 11 p.m.
3	0·163	5·0	6·5	5·8	3.—Fine from 7 p.m. until 10·30 p.m. Forenoon dull. Shower at 8·5 a.m.
4	0·270	5·5	8·0	6·8	4.—Fine after 2 p.m. until about 4 p.m., and again from 7 30 p.m. until 8·30 p.m. Strong dry breeze. Like thunderstorm, W., at 5 p.m. Lightning, N.W., at 8·55 p.m. Partial lunar haloes during evening.
5	0·227	5·5	8·5	7·0	5.—Cloudy. Strong breeze. Total lunar eclipse from 12·11 a.m. until 3·40 a.m. Thunderstorm, N.W., from 10·45 p.m. until about 11·10 p.m. with lightning. Began to rain at 9·49 p.m.
6	0·061	9·0	9·0	9·0	6.—Cloudy and dull. Fine, 7 p.m. until 8·45 p.m. Rain at intervals during morning. Heavy rain at 5 p.m. Thunder at 7 17 a.m. and at 9·48 a.m. with lightning.
7	0·138	7·0	6·0	6·5	7.—Cloudy and very dull, partial clearing at 8 p.m. Raining from 2·50 p.m. until about 6·30 p.m.
8	0·220	4·0	7·0	5·5	8.—Cloudy after 3·30 p.m. Forenoon warm. Meteor observed in direction E.N.E. to W.S.W., 5th magnitude and of a whitish color.
9	0·196	...	...	4·3	9.—Fine from 10·30 a.m. until 1·10 p.m. Heavy thunderstorm with lightning at 1·23 p.m. Raining heavily during storm from 1·36 p.m. Rained again about 9·30 p.m. Electrometer 0 to 90 during thunderstorm.
10	...	6·0	9·0	7·5	10.—Cloudy at 9 p.m. and raining. Lightning all round during evening. Violent thunderstorm from about 11·20 p.m. until about 2 a.m. Thunder clouds S.W. and W. at 3 p.m.
11	...	7·5	...	...	11.—Cloudy and dull. Thunder, E., at 10·45 a.m., and at intervals until 2·50 p.m. Lightning, 12·15 p.m. Rained heavily during day. S. gale at 9·40 p.m.
12	0·163	6·5	7·0	6·8	12.—Fine after 12·30 p.m. Strong cold breeze until evening. Morning showery. Dew fell in the evening.
13	0·316	4·0	6·0	5·0	13.—Fine from 2 p.m. until 2 30 p.m., and again at 9 p.m. Strong dry breeze. Evening cold. Lightning, E., at 9·45 p.m.
14	0·188	3·5	6·0	4·8	14.—Fine from 10 a.m. until 11 a.m. Very light drops of rain at 2·50 p.m. Raining from 3·55 p.m. until 4 15 p.m.
15	0·113	8·5	9·0	8·8	15.—Cloudy. Light thunderstorm, 1·20 p.m. until 1·45 p.m. Heavy shower, 12·58 p.m. Heavy steady rain all evening from 6·37 p.m. Electrometer 0 to 90 during thunderstorm.
16	0·196	...	...	4·0	16.—Afternoon and evening fine. Forenoon dull. Like rain between 11 a.m. and noon.
17	0·132	7·0	9·0	8·0	17.—Cloudy and dull. Raining at 11·18 a.m., and again lightly from 9·15 p.m. to 9·20 p.m. Like thunderstorm, W., at 5 p.m. Lightning, S.E., all evening from 7·21 p.m.
18	0·228	5·5	8·0	6·8	18.—Fine until between 10 a.m. and 11 a.m. Light rain, 1·33 p.m. Thunder, 2·25 p.m. Electrometer 0 to 90 during forenoon and afternoon. Lightning, N.E., during the evening.
19	0·124	4·5	8·0	6·3	19.—Dull with strong breeze in the forenoon. Fine from 4 p.m. until towards evening, then cloudy; final clearing between 7 p.m. and 8 p.m. Light shower, 2·45 p.m.
20	0·097	7·0	6·0	6·5	20.—Light rain at intervals until noon. Very dull during day. Fine in the evening from 7·45 p.m. until 8 p.m., and again at 11 p.m.
21	0·089	5·5	6·0	5·8	21.—Fine from 8 p.m. until 9 30 p.m. Raining, 1·30 p.m. until 2·30 p.m. Heavy thunderstorm, W. to E., from 6·46 p.m. until 8 p.m. Thunder, W., 9·15 p.m.; another thunderstorm, W. to E. from 10·25 p.m. until 11·20 p.m. Raining during thunderstorms. Lightning all round during evening.
22	0·044	7·0	9·0	8·0	22.—Cloudy and very dull. Light rain, 11·15 a.m., and from 1 p.m. until 2 p.m. Raining again at 4·40 p.m. Fresh breeze all day.
23	0·202	...	...	3·0	23.—Evening fine until about 9 p.m. Raining all morning from 5 a.m. until about 9·45 a.m., and lightly after 1 p.m., and at 9·30 p.m. Strong cold breeze in forenoon.
24	0·196	6·0	7·5	6·8	24.—Cloudy. Strong dry breeze.
25	0·296	6·5	6·5	6·5	25.—Evening fine from 7·30 p.m. until 8·30 p.m. Dry fresh breeze until evening.
26	0·162	5·0	6·0	5·5	26.—Evening fine from about 8 p.m. until 9·30 p.m., and again after 10·30 p.m. Dull during day. Light rain from 8 45 a.m. until 9·27 a.m.
27	0·172	5·0	8·5	6·8	27.—Cloudy from 1·30 p.m. until 7 p.m. Clouds very light. Forenoon warm. Morning calm. Fresh dry breeze. Lightning, S.S.W., at 8·45 p.m.
28	0·162	6·5	9·0	7·8	28.—Cloudy, clouds light during forenoon. Heavy thunderstorm, N.W. to E, from 2 p.m. to 3·35 p.m. Raining heavily from 2·56 p.m. until 3·45 p.m. Lightning, 2·45 p.m. Electrometer 0 to 90 during thunderstorm.
29	0·261	...	...	4·8	29.—Cloudy and dull, like rain; partial clearing at 8·45 p.m. Dropping rain, 1·43 p.m., and 1·50 p.m. Showers at 5 38 p.m. and 8·37 p.m.
30					30.—Cloudy from 10 a.m. Strong breeze. Atmosphere very dry.
	Sum.				
Means	5·326	5·9	7·5	6·2	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

SYDNEY, NOVEMBER, 1873.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																			
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.
1	29·759	29·812	11 p.m.	29·677	3 p.m.	...	...	...	...	12	12	...	...	...	...	...	...	...	...	...	...	333	13·9	1·0	4·2 W. 1·24 p.m.
2	29·860	30·022	8 a.m.	29·754	3 p.m.	4	4	...	...	3	...	1	...	...	1	2	5	3	...	...	1	368	15·3	1·2	5·1 S.S.W. 2· 8 a.m.
3	30·034	30·055	11 a.m., 10 & 11 p.m., & 7 & 8 am.	30·002	2 p.m.	...	...	...	...	...	...	...	...	1	7	2	4	5	3	1	1	291	12·1	0·7	2·0 N.N.E. 8·12 a.m.
4	29·950	30·051	9 a.m.	29·893	8 a.m.	...	...	...	...	...	...	...	1	1	7	13	2	...	...	...	...	504	21·0	2·2	11·0 N.E. 11·50 a.m.
5	29·681	29·868	9 a.m.	29·615	3 a.m.	...	...	...	...	...	...	1	...	...	4	7	2	...	...	...	...	440	18·3	1·7	34·4 N.E. 4·38 p.m.
6	29·667	29·705	8 p.m.	29·626	3 p.m.	5	3	2	2	8	...	...	...	...	...	...	...	...	...	1	...	428	17·8	1·6	5·8 S. 2·5 p.m.
7	29·645	29·684	10 p.m.	29·594	2 p.m.	1	...	...	3	16	1	...	...	...	...	...	...	...	...	1	2	316	13·2	0·9	3·1 W. 9· 0 p.m.
8	29·681	29·743	7 a.m.	29·593	3 p.m.	2	1	2	4	...	...	...	...	...	...	...	...	...	6	5	4	134	5·6	0·2	1·0 E.S.E. 2· 0 p.m.
9	29·622	29·703	9 a.m.	29·578	4 p.m.	3	2	2	2	...	1	...	...	1	3	2	1	5	1	...	1	335	14·0	1·0	7·2 E. 4·10 p.m.
10	29·665	29·700	11 & 12 p.m.	29·630	1, 2, & 4 p.m.	9	7	...	3	...	1	...	...	...	...	...	...	...	...	1	3	425	17·7	1·6	10·1 W.S.W. 1· 0 a.m.
11	29·629	29·665	9 a.m.	29·588	2 a.m.	10	2	...	2	6	1	...	...	1	...	...	...	...	...	2	...	550	22·9	2·6	9·7 S. 1·40 a.m.
12	29·615	29·656	9 p.m.	29·529	8 a.m.	2	10	2	1	9	...	...	...	...	...	...	...	...	...	...	...	309	12·9	0·8	15·7 S.S.W. 1· 5 p.m.
13	29·546	29·706	8 a.m.	29·429	1 & 2 p.m.	...	...	...	...	5	...	...	...	...	1	1	1	2	...	...	...	...	...	...	....
14	29·802	29·864	10 p.m.	29·729	10 a.m.	8	4	3	2	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	....
15	29·886	29·945	8 a.m.	29·813	12 a.m.	6	5	2	2	9	...	...	...	...	...	...	...	...	...	...	...	259	10·8	0·6	2·6 S.S.W. 1· 0 p.m.
16	29·893	29·952	9 a.m.	29·853	4 p.m. & 4 a.m.	2	1	...	...	2	...	...	2	...	6	...	...	9	1	...	1	116	4·8	0·1	0·6 E. 3·20 p.m.
17	29·787	29·853	9 a.m.	29·731	3 p.m.	4	3	1	5	2	1	5	2	1	...	...	...	...	...	...	...	200	8·3	0·4	2·0 S. 11· 0 p.m.
18	29·870	29·936	7 a.m.	29·787	3 p.m.	...	...	4	3	...	...	...	...	...	...	...	...	1	...	6	1	...	...	...	....
19	29·953	30·002	10 p.m.	29·896	1 p.m.	9	...	1	1	1	4	...	1	1	...	...	...	...	...	...	3	...	...	...	....
20	29·938	29·995	10 a.m.	29·892	4 a.m.	...	...	...	...	...	1	...	...	1	5	15	2	...	...	...	...	...	...	...	....
21	29·837	29·915	6 p.m.	29·795	2 & 4 a.m.	6	...	1	1	...	...	...	...	...	...	3	8	3	...	...	2	...	...	...	....
22	29·808	29·830	9 a.m. & 7 p.m.	29·785	3, 4, & 6 a.m.	12	11	...	...	...	...	...	...	...	...	...	...	...	...	...	1	389	16·2	1·3	4·2 S. 8·37 a.m.
23	29·861	29·900	9, 10, & 11 p.m.	29·820	9 a.m.	4	14	1	5	...	...	...	...	...	...	...	...	...	...	...	...	586	24·4	3·0	14·6 S.S.W. 1·20 p.m.
24	29·813	29·850	9 a.m.	29·783	1 a.m.	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	....
25	29·818	29·864	9 p.m.	29·791	3, 4, & 5 a.m.	10	...	1	...	...	...	...	...	...	...	...	...	...	...	1	11	273	11·4	0·6	2·0 S. 11·25 a.m.
26	29·781	29·812	9 a.m.	29·756	3 & 4 a.m.	1	...	4	5	...	...	...	...	...	...	...	...	2	6	4	2	177	7·4	0·3	1·6 S.E. 4·23 p.m.
27	29·704	29·799	9 a.m.	29·668	5 p.m.	...	...	1	1	...	...	...	...	...	...	9	8	4	1	...	...	213	8·9	0·4	2·2 E. 2·55 p.m.
28	29·615	29·681	9 a.m.	29·581	2 a.m.	10	...	...	...	...	...	1	...	...	1	3	6	1	...	2	278	11·6	0·7	5·8 S. 1·37 a.m.
29	29·719	29·860	8 a.m.	29·629	9 a.m.	17	1	...	...	...	...	...	...	...	...	...	...	...	...	..	6	447	18·6	1·7	5·1 S.S.E. 8·40 a.m.
30	29·921	30·000	8 a.m.	29·865	4 p.m.	17	...	...	...	...	...	...	...	...	...	...	...	...	...	2	5	479	20·0	2·0	5·8 S. 3·57 p.m.
Sums or Means.	29·779	30·055	November 3rd, 11 a.m., 10 & 11 p.m., & 7 & 8 a.m.	29·429	November 13th, 1 & 2 p.m.	146	70	27	43	73	22	7	7	7	34	54	36	40	19	24	50	Sum 7850	Mean. 14·2	Mean. 1·2	

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer. Anemometer under repair during 7 days.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of NOVEMBER, 1873.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., November, 1873.										For 24h. previous to 9 a.m.				
						Wind.			Temperature in Shade.				Rain.				Evaporation in inches.
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Direction	Force 0-6	Clouds 0-10.	Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·092	77·2	39·0	S.E.	...	...	90·1	64·3	100·1	55·5	No	rain	...	...	12·946
Tenterfield ...	80	...	...	...	..	.....	...	...	...	...	...	...	...	...	...	...	...
Grafton	22	...	...	74·4	...	S.W.	0·4	4·5	90·2	58·6	98·7	51·4	3·070	4	1·160	20	5·107
Bourke	393	...	...	69·4	...	S.	0·1	1·6	...	...	95·0	...	1·140	5	0·920	6	...
Narrabri	196	...	...	69·9	...	S.W.	1·3	1·6	84·6	55·2	93·9	43·5	3·910	5	1·460	6	9·571
Armidale.....	80	3278	...	59·9	90·0	W.	1·6	4·5	69·1	50·7	76·9	42·2	2·250	6	0·600	1	5·253
Goonoo Goonoo	110	1550	...	65·4	57·0	W.	0·5	3·6	78·0	52·7	88·0	46·9	3·930	6	1·300	1&30	...
Port Macquarie	0	53	29·963	64·9	...	S.W.	1·8	3·6	74·0	55·7	81·9	48·0	6·310	13	1·360	30	5·697
Murrurundi ...	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	63·4	...	W.	0·5	7·7	76·7	50·0	89·1	40·2	2·300	5	1·140	24	4·751
Scone	78	...	...	...	...	S.	0·9	2·3	...	53·8	...	40·2	2·410	8	0·800	12	5·132
Muswellbrook..	68	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Dubbo	182	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Mudgee	121	...	...	61·7	...	E.S.E.	1·1	...	74·5	48·9	80·4	41·0	2·380	5	0·850	1	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	4·860	13	1·220	12	...
West Maitland	18	...	...	66·3	...	W.	1·3	6·1	73·9	58·7	89·1	50·5	4·870	13	1·430	12	...
Lambton	7	...	...	60·9	...	S.	1·4	...	69·0	52·7	79·3	43·0	6·520	17	2·020	12	4·069
Newcastle	1	112	29·936	63·4	71·0	S.W.	0·5	4·2	70·8	56·0	80·3	49·3	5·840	13	1·410	24	...
Orange.....	124	2891	...	60·6	...	S.	1·7	5·6	67·6	53·6	75·5	37·6	4·990	14	0·930	1	4·127
Bathurst	96	2200	29·943	57·2	71·0	S.E.	1·3	5·4	73·8	40·6	89·0	20·5	3·550	9	1·170	12	...
Forbes	176	...	...	62·1	...	W.	0·9	4·2	74·7	49·5	81·2	40·1	...	...	...	...	...
Kurrajong	36	1870	...	53·8	...	S.E.	...	...	60·6	47·0	73·0	42·0	4·950	17	0·820	22	...
Mount Victoria	61	3490	29·932	54·3	74·0	S.E.	0·0	6·8	65·4	43·1	76·6	36·9	5·410	14	1·670	12	4·236
Woodford	50	2192	29·862	57·3	...	W.	0·1	...	63·0	51·5	78·3	46·9	8·440	19	2·870	12	...
Parramatta.....	16	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
South Reef	0	...	...	...	...	S.	1·8	6·7	...	...	...	...	8·680	16	3·120	11	...
Sydney.....	5	155	29·972	62·9	73·8	S.	1·2	7·3	69·0	56·8	77·8	50·8	9·447	21	3·040	11	5·326
Liverpool.....	16	...	29·959	62·1	...	S.	0·4	5·6	71·7	52·5	87·0	46·0	7·264	23	2·790	12	...
Wentworth.....	476	...	...	67·6	...	S.W.	1·2	5·3	81·1	54·0	95·6	43·6	0·490	5	0·160	14	8·050
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	4·470	12	2·040	11	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	6·600	17	2·570	12	...
Young	140	...	...	56·1	...	S.W.	0 7	...	73·3	38·8	85·0	31·1	2·790	8	1·730	1	7·588
Wollongong ...	0	...	...	63·2	...	S.	1·9	...	70·3	56·1	77·4	52·2	3·340	11	1·200	11	3·892
Moss Vale	31	...	...	56·6	...	S	1·6	...	65·1	48·0	79·7	42·8	8·820	11	4·050	12	...
Goulburn.....	54	2129	29·965	58·2	69·0	S.S.E	0·0	6·8	70·3	46·0	83·2	36·6	6·550	14	1·210	1	4·470
Terara'.....	4	...	...	...	...	S.E.	2·8	...	...	...	...	...	6·510	14	1·770	11	...
Wagga Wagga	161	...	...	61·3	...	W.	1·1	...	70·5	52·1	84·1	40·9	2·540	5	1·060	6	...
Cape St. George	0	175	29·947	62·0	42·0	S.	2·9	6·6	68·6	55·4	78·2	50·6	6·550	15	1·400	7	...
Queanbeyan ...	60	...	...	55·6	...	E.S.E.	0·3	7·0	63·0	48·1	72·2	40·1	6·860	13	1·300	11	5·738
Urana	218	...	...	66·1	...	W.	2·1	2·5	79·4	52·7	91·5	39·1	0·610	3	0·310	1	8·377
Deniliquin	287	410	30·032	62·7	62·0	S.W.	1·6	2·9	80·7	44·7	91·3	33·2	1·460	6	0·420	26	...
Kiandra	88	4640	29·989	40·5	72·0	S.E.	3·8	7·0	57·7	23·2	68·2	9·3	11·400	17	2·500	6	...
Cooma	52	2637	...	55·2	..	N.	2·6	8·5	67·6	42·7	81·6	35·8	3·830	15	0·650	24	2·069
Albury.....	175	572	29·995	61·4	68·0	S.	1·1	4·9	76·6	46·1	89·4	36·3	3·380	13	0·830	6	...
Eden.....	0	107	29·990	61·7	67·0	S.W.	1·4	6·3	70·0	53·4	81·0	49·1	8·100	19	1·800	6	...

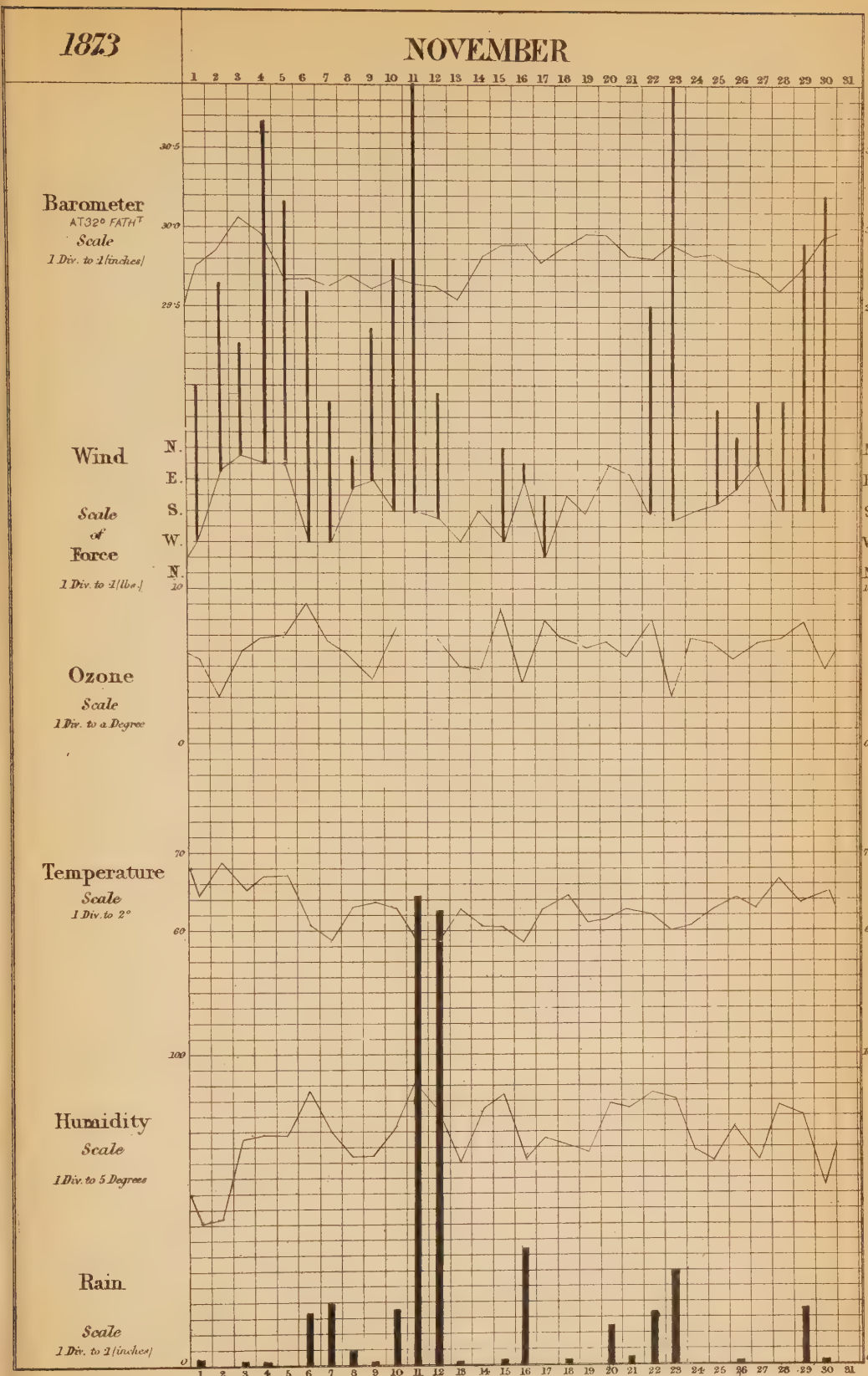
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Distant thunderstorms, 4th, 19th, 20th, 21st, 22nd, and 27th; with few drops of rain.
Grafton—Thunderstorm, 24th.
Bourke—Thunderstorms, 5th, 11th, 26th, 28th, and 29th.
Narrabri—Heavy thunderstorm, 6th; and stormy, 29th.
Armidale—Heavy storm, 6th; stormy, 22nd; and hot, 18th.
Goonoo Goonoo—Thunderstorms, 22nd and 29th.
Port Macquarie—Thunderstorms, 6th, 10th, 11th, 15th, 17th, 18th, 19th, 21st, 22nd, and 29th; hail, 11th; and squally, 12th.
Cassilis—Thunderstorms, 4th, 6th, 11th, 21st, 23rd, 28th, and 29th.
Scone—Thunderstorms, 4th, 6th, 11th, and 29th; much sickness, 23rd.
Mudgee—Thunderstorms, 4th and 5th; and hot, 18th.
Dalwood—Thunderstorms, 6th, 15th, 18th, 19th, 22nd, and 28th; and hail, 15th, very severe.
West Maitland—Thunderstorms, 6th, 15th, 18th, and 28th.
Lambton—Heavy gale and hail, 1st; thunder and lightning prevalent.
Newcastle—Stormy, 12th, 23rd, and 24th; and heavy sea, 12th, 24th, and 25th.
Orange—Thunderstorms, 9th, 11th, 21st, 22nd, 28th, and 30th.
Bathurst—Thunderstorms, 5th, 21st, 22nd, and 28th.
Kurrajong—Thunderstorms, 4th, 5th, 6th, 9th, 10th, 11th, 14th, 15th, 17th, 18th, 21st, and 28th.
Mount Victoria—Thunderstorms, 4th, 5th, 9th, 10th, 15th, 21st, 22nd, 28th, and 29th; and foggy during month.
Woodford—Thunderstorms, 4th, 9th, 10th, 15th, 21st, and 28th; hail, 4th and 28th.
South Reef—Thunderstorms, 5th, 9th, 10th, 11th, 15th, 18th, and 29th; S.E. gales, 11th, 12th, 23rd, and 24th; and heavy sea, 23rd and 24th.
Sydney—Lunar halo, 1st; eclipse, 5th; S. gales, 2nd and 11th; and thunderstorms, 5th, 6th, 9th, 11th, 15th, 18th, 21st, and 28th.
Liverpool—Thunderstorms, 4th, 5th, 6th, 9th, 10th, 11th, 15th, 18th, 21st, 23rd, and 28th; hail, 28th; and flood in George's River, 11th.
Wentworth—Strong wind, 13th; and hot, 27th and 28th.
Wilton—Thunderstorms, 4th, 5th, 6th, 9th, and 28th.
Cordeaux River—Thunderstorms 5th to 11th, 13th, 14th, 19th, 23rd, and 28th; and heavy S. squall, 17th.
Young—Thunderstorm, 9th.
Moss Vale—Thunder, 4th, 5th, 6th, and 11th.
Goulburn—Thunderstorms, 4th, 5th, and 28th.
Terara—Thunderstorms, 5th, 10th, and 28th; S.E. gale, 11th.
Cape St. George—Thunderstorms, 5th, 9th, 18th, and 28th; W. gale, 1st; E.S.E. gale, 11th; and heavy sea, 24th and 25th.
Queanbeyan—Thunderstorms, 4th, 5th, 9th, 11th, 18th, 22nd, and 28th.
Urana—Observer absent on duty during portion of month.
Deniliquin—Heavy thunderstorm, 12th; and heavy rain, 26th.
Kiandra—Snowing, 1st, 6th, 9th, 10th; and thunderstorms, 10th, 11th, 27th, and 28th,
Cooma—Thunderstorm, 28th, with heavy rain.
Albury—Thunderstorm, 5th, 9th, 12th, and 22nd.
Eden—Thunder-squalls, 2nd and 27th; lunar eclipse, 4th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney.

Force of Wind 3.0 lbs on 23rd — Dew 13th

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF DECEMBER, 1873;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1874.

[*Price 6d.*] 3u 2—74

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

DECEMBER, 1873.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading ...	...	30·096	On the 30th, at 3 a.m.
	Lowest Reading ...	...	29·246	On the 19th, at 4 p.m.
	Mean Height ...	...	29·755	

(Being 0·007 in. less than that in the same month on an average of the preceding 14 years.)

WIND	Greatest Pressure...	...	18·6 lbs.	On the 17th and 26th.
	Mean Pressure ...	...	0·6 lb.	
	Number of Days Calm ...		0	
	Prevailing Direction	...	S.	

(Prevailing direction during the same month for the preceding 14 years N.E.)

TEMPERATURE	Highest in the Shade ...	100·1	... On the 16th.
	Lowest in the Shade ...	56·5	... On the 1st.
	Greatest Range	31·9	... On the 16th.
	Highest in the Sun ...	133·3	... On the 16th.
	Highest in Black Box with Glass Top	221·0	... On the 12th.
	Lowest on the Grass ...	48·0	... On the 21st.
	Mean Diurnal Range ...	14·5	
	Mean in the Shade ...	71·3	

(Being 2·2 greater than that of the same month on an average of the preceding 14 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 17th.
	Least	46·0	... On the 12th and 26th.
	Mean	71·6	

(Being 0·6 greater than that of the same month on an average of the preceding 14 years.)

RAIN	Greatest Fall	2·604 inches.	On the 29th.
	Number of Days	13 rain and 3 dew.	
	Total Fall	2·998 inches.	65 feet above ground.
		4·425 inches.	15 inches above ground.

(Being 2·138 inches greater than that of the same month on an average of the preceding 14 years.)

EVAPORATION	Total Amount	6·928 inches.
OZONE	Mean Amount	5·4

(Being 1·1 greater than that in the same month on an average of the preceding 13 years.

ELECTRICITY ..	Number of Days Lightning	3
CLOUDY SKY ..	Mean Amount	6·9
	Number of Clear Days ...	2
METEORS ..	Number Observed ...	0

REMARKS.

The mean temperature was 2°.2 greater than the average for this month; and generally over the Colony the weather was hot, with much cloud and rain on the coast, especially from Grafton to Sydney. At Port Macquarie the total fall amounted to 25 inches, of which 8 inches fell on one day. Inland, however, and south of Sydney, the rainfall has been small, in twelve places less than one inch for the whole month, and at Thargomindah no rain at all fell.

Thunderstorms were frequent, and hail fell on the 12th and 13th. A whirlwind passed Bourke on the 20th. On the 8th a faint aurora was observed at Queanbeyan, and on the 18th at 9·45 p.m., a white light like aurora was seen to the E. by S. of Macleay River; and from E. to E.N.E. a crimson light flickering like an aurora was seen for four or five minutes. It was very bright, and could be seen through light clouds. All faded in about fifteen minutes, and two or three minutes afterwards two bright meteors were seen, a red one from the east with a train like a rocket; the other, with a blueish white and larger head, came from N.E. Lunar haloes were observed at Sydney on the 29th.

SYDNEY, DECEMBER, 1873.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.								Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	Sea Water. 9 a.m.	Mean 9.3.9.	Taken at 9,3, & 9.
1		30·189	S.	262	59·7	57·7	64·1	56·5	7·6	60·3	78·2	53·0	65·4	88·3	0·585	10·0
2		·189	E.S.E.	268	64·9	61·0	70·1	56·9	13·2	63·5	111·1	54·0	65·9	78·3	0·453	10·0
3		·133	S.E.	230	66·2	59·8	71·1	59·0	12·1	65·1	106·9	54·9	66·3	66·3	·0	10·0
4	Full Moon	·024	S.E.	178	67·4	61·6	72·2	58·8	13·4	65·5	107·2	53·7	66·5	70·3	0·016	10·0
5		·029	S.W.	128	65·0	61·6	74·2	60·7	13·5	67·5	115·7	53·4	66·7	79·5	0·035	10·0
6	G. N. Dec.	·040	S.W.	127	69·4	63·9	75·0	60·6	14·4	67·8	115·3	55·0	67·0	72·3	0·036	3·3
7		·119	W.S.W.	178	68·4	61·7	74·1	60·6	13·5	67·4	113·0	55·0	67·1	66·0	0·107	10·0
8		·062	N.	131	68·7	64·5	74·5	61·6	12·9	68·1	113·6	58·2	67·5	77·7	0·290	3·7
9		29·949	E.N.E.	297	73·1	67·5	78·2	59·8	18·4	69·0	116·4	51·8	67·3	72·3	0·001	4·3
10		·748	N.E.	468	74·8	70·0	79·6	65·0	14·6	72·3	115·0	57·0	67·7	76·0	·0	3·3
11		·727	S.	172	72·3	68·5	79·5	67·2	12·3	73·4	113·0	61·5	67·5	79·7	·0	6·3
12	Apogee. Last Qr.	·781	E.N.E.	326	74·7	68·5	89·1	66·6	22·5	77·9	126·3	58·6	67·3	59·7	·0	0·0
13	In Equat.	·838	S.	353	74·6	70·4	78·2	65·7	12·5	72·0	110·8	59·4	67·7	78·7	·0	6·0
14		30·087	E.	227	71·3	66·4	78·9	66·4	12·5	72·7	111·0	61·0	67·5	74·0	0·001	10·0
15		·133	N.E.	316	76·0	70·5	85·5	65·6	19·9	75·6	119·0	56·7	67·6	73·7	·0	2·0
16		29·945	.....	316	83·7	74·6	100·1	68·2	31·9	84·2	133·3	59·0	67·8	61·7	0·001	3·7
17		·784	S.	400	70·4	67·1	82·4	73·5	8·9	78·0	115·9	68·3	67·6	83·7	·0	10·0
18		30·049	W.N.W.	92	67·2	62·6	77·4	62·6	14·8	70·0	112·2	60·1	68·3	75·0	0·220	10·0
19		29·590	W.S.W.	284	76·0	70·8	86·2	64·3	21·9	75·3	122·0	61·5	68·9	74·0	0·017	7·3
20	G. S. Dec. New Moon	·682	N.W.	201	68·9	60·2	71·1	66·3	4·8	68·7	90·1	57·0	69·3	57·7	0·056	7·7
21		·628	W.S.W.	271	69·5	59·4	84·1	58·8	25·3	71·5	121·9	48·0	69·6	53·0	·0	10·0
22		·787	E.S.E.	212	70·1	60·3	75·6	62·3	13·3	69·0	113·8	54·0	69·8	54·7	·0	0·7
23		·953	N.E.	305	74·1	68·8	80·6	59·6	21·0	70·1	117·2	52·2	70·1	74·0	·0	0·0
24		·995	N.E.	159	75·6	71·5	81·9	68·0	13·9	75·0	117·8	61·5	70·3	79·0	·0	2·0
25	Perigee	·940	N.N.E.	342	79·5	72·8	86·2	68·9	17·3	77·6	122·1	63·0	70·5	68·0	0·002	7·0
26		·710	S.	524	78·8	70·3	92·6	74·1	18·5	83·4	129·4	68·0	70·8	65·0	·0	10·0
27	In Equat. First Qr.	30·154	E.	258	67·0	60·1	71·7	63·5	8·2	67·6	79·8	59·2	70·7	64·3	·0	10·0
28		·121	W.N.W.	110	70·4	63·0	72·1	65·5	6·6	68·8	99·0	57·8	71·1	63·0	0·001	10·0
29		29·886	S.	244	74·6	72·2	81·1	64·5	16·6	72·8	118·9	62·6	71·5	87·3	2·604	8·0
30		30·160	S.S.E.	168	69·5	65·6	71·7	66·9	4·8	69·3	85·0	61·3	71·3	78·3	·0	10·0
31		·228	S.E.	95	69·3	63·4	75·1	66·6	8·5	70·9	108·1	59·6	71·1	69·3	·0	10·0
Means	.....	29·957	S.	7642	71·3	65·7	78·5	64·0	14·5	71·3	111·6	57·9	68·5	71·6	Sum. 4·425	6·9

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·028 above the true mean for the day. Dew 9th, 16th, and 25th.

SYDNEY, DECEMBER, 1873.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·015	8·0	8·0	8·0	1.—Cloudy and very dull. Raining all morning from 5·45 a.m. until about 9·45 a.m. Evening showery. Rainbow E. at 5 p.m.
2	0·170	6·5	7·0	6·8	2.—Cloudy and dull. Light rain at intervals in morning, at 3·35 p.m., and from 7·40 p.m. until 7·45 p.m. Fresh breeze. Partial clearing of clouds at intervals during the evening.
3	0·166	5·0	8·0	6·5	3.—Cloudy and dull with dry fresh breeze. Very light showers at 6 p.m. and about 9·30 p.m.
4	0·175	5·0	7·5	6·3	4.—Cloudy and dull, breaks in clouds at intervals. Light rain from 7·55 p.m. until about 8·30 p.m.
5	0·192	5·0	6·5	5·8	5.—Light rain at intervals during morning. Partial clearing of clouds, then fine at 11·30 a.m. Afternoon and evening fine until 8·40 p.m. Heavy shower at 9·15 p.m.
6	0·187	3·0	6·5	4·8	6.—Cloudy until after 11 a.m., and again with light clouds about 6 p.m. for a while and cleared. Fresh breeze at mid-day and warm. Evening hazy and dew falling.
7	0·190	...	...	3·3	7.—Shower at 5·45 a.m. Morning dull. Fine from about 11 a.m. until after 1 p.m. Light clouds during afternoon and evening. Heavy showers at 10·5 p.m. and 10·40 p.m.
8	0·223	4·0	4·0	4·0	8.—Shower about 3·15 a.m. Morning cloudy and dull. Clouds cleared about 11 a.m. No clouds in the evening. Very dry fresh breeze.
9	0·284	2·5	7·0	4·8	9.—Cloudy and fine alternately and very warm. Fresh breeze.
10	0·298	4·0	6·0	5·0	10.—Cloudy and fine alternately. Clouds were very light. Very warm. Strong and very dry breeze. Evening hazy and dew falling.
11	0·198	4·0	0·0	2·0	11.—Cloudy and fine alternately. Morning dull. Light clouds in evening and hazy looking. Fresh breeze and very warm.
12	0·376	4·0	6·0	5·0	12.—Fine and very hot. No clouds until afternoon, when several small patches appeared on horizon, S.W. Fresh breeze. Forenoon hazy.
13	0·299	4·0	7·0	5·5	13.—Morning dull. Fine from 10 a.m. until after 1 p.m., and from 4 p m. until after 9 p.m., and again about 10·30 p.m. Like thunderstorm S. and S.W. since noon. Lightning S. to E. all evening from 7·46 p.m., flashing very rapidly. S. squall with light rain from 9·36 p.m. till 9·55 p.m.
14	0·170	...	...	3·3	14.—Cloudy. Morning dull. Light rain from 11·20 a.m. until noon, and again a while in the afternoon. Clouds broken rest of day and very warm.
15	0·297	7·0	7·5	7·3	15.—Cloudy until about 11 a.m. Very warm. Strong dry breeze all afternoon and evening.
16	0·410	2·0	7·5	4·8	16.—Cloudy from noon. Clouds very light until towards evening. Like thunderstorm in the evening. Hot wind from 10·15 a.m. until 1·10 p.m. Lightning S.E. all evening from 8·15 p.m.
17	0·218	8·0	9·0	8·5	17.—Cloudy. Clouds light until noon. Thunderstorm S. at 1·57 p.m. with strong S. gale and very heavy rain. Storm over about 3 p.m. Raining very lightly part of the afternoon and all evening. Lightning S. at 1·52 p.m.
18	0·109	5·0	7·0	6·0	18.—Cloudy and very dull like rain. Clouds unbroken during day.
19	0·288	5·0	7·5	6·3	19.—Fine until 9·45 a m. Like thunderstorm all afternoon. Heavy shower at 2·2 p m. Showers at 2·35 p.m. and 6·20 p.m.; also, dropping rain, 5·20 p.m. and 6 p.m. Partial clearing. Fine for a while about 8 p.m. Rainbow E. at 7 p.m.
20	0·166	5·5	7·0	6·3	20.—Strong breeze in the morning. Dull during day. Clouds began to clear after 8 p.m., and fine at 8·50 p.m.
21	0·334	...	...	3·8	21.—Cloudy and fine alternately.
22	0·308	5·0	6·5	5·8	22.—Strong breeze in the morning. Very dry breeze all day and fine. No clouds at 3 p.m. Calm at 9 p.m.
23	0·316	5·5	6·5	6·0	23.—Fine. No clouds during day. Very warm. Fresh dry breeze in the afternoon. Hazy and light dew falling in the evening.
24	0·276	5·5	5·0	5·3	24.—Morning cloudy; light clouds again at 4 p.m. for a while, also from 7 p.m. to 8 p.m. Morning very hot. Dry fresh breeze in the afternoon. Like thunderstorms approaching N.E. at 3 p.m. Evening hazy and dew falling. Calm at 9 p.m.
25	0·350	...	...	4·0	25.—Cloudy and fine alternately. Very hot. Clouds were light until afternoon, when it looked like an approaching storm. Cleared towards evening.
26	0·374	5·5	6·0	5·8	26.—Cloudy. Morning very dull until 9·30 a m. Partial clearing of clouds during forenoon, and very hot. Electrometer steady at 90 at 3 p.m. Drops of rain, 3 p.m., and raining lightly during evening. S. gale, 4·15 p.m. Thunderstorms, N.W., S.W., and S S.E.
27	0·130	4·5	5·5	5·0	27.—Cloudy and very dull. Sprinkling rain at 1·57 p.m., 2·22 p.m. and 3·12 p.m., also at intervals in the afternoon. Breaks in clouds at 9·45 p.m.
28	...	...	...	3·3	28.—Morning cloudy and dull. Dropping rain, 9·53 a.m., and again at 10·15 a.m., steady rain remainder of day.
29	0·236	5·5	6·5	6·0	29.—Raining from 1 a.m. until 3·30 a m. Morning cloudy and dull, gradual clearing after 10 a.m. Fine after 1 p m. Evening cloudy after 6 p.m. with Lunar halo, and clouds driving in from S. Very light rain from 9·35 p.m. until about 10 p.m.
30	0·086	5·5	6·5	6·0	30.—Cloudy and very dull like rain. Clouds unbroken during day. Very light rain dropping, 9·10 a.m. Very light showers, 6·3 p.m., 7·4 p.m., and 7·24 p.m.
31	0·087	6·5	7·0	6·8	31.—Cloudy and very dull like rain until evening, when the clouds began to break.
	Sum.				
Means	6·928	5·0	6·5	5·4	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

SYDNEY, DECEMBER, 1873.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																		
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·992	30·033	9 p.m.	29·950	3 a.m.	6	4	...	1	...	...	...	...	...	...	...	...	...	3	5	5	262	10·9	0·6	1·6	S.S.E.	3· 0 p.m.
2	29·962	30·007	9 a.m.	29·922	2 & 3 a.m.	...	...	...	...	...	...	...	1	3	...	...	1	3	14	1	1	268	11·2	0·6	1·8	E.S.E.	1· 8 p.m.
3	29·890	29·958	9 a.m.	29·845	3 a.m.	2	...	...	4	...	...	...	...	...	...	...	...	1	7	8	2	230	9·6	0·5	1·6	E.S.E.	10·55 a.m.
4	29·827	29·847	9 a.m.	29·798	3 a.m.	2	...	...	...	...	...	...	...	...	...	...	...	...	8	12	2	178	7·4	0·3	2·0	S.E.	12·57 p.m.
5	29·832	29·861	9 p.m. & 8 a.m.	29·811	2, 3, & 4 p.m.	...	1	8	...	...	...	...	...	...	...	...	...	2	7	5	1	128	5·3	0·1	1·0	E.S.E.	2· 0 p.m.
6	29·879	29·927	8 a.m.	29·830	3 p.m.	2	2	9	...	...	...	...	...	...	...	...	...	...	3	7	1	127	5·3	0·1	1·0	S.E.	3·15 p.m.
7	29·875	29·945	9 a.m.	29·838	3 & 4 a.m.	5	3	...	10	...	...	...	...	...	...	...	...	...	...	2	4	178	7·4	0·3	1·3	S.	10·38 a.m.
8	29·824	29·885	9 a.m.	29·772	4 a.m.	...	...	...	1	...	...	...	...	10	...	...	4	8	1	...	...	131	5·5	0·2	0·7	E.	11·55 a.m.
9	29·652	29·780	9 a.m.	29·602	8 a.m.	...	...	...	...	...	...	...	1	...	2	10	11	...	...	...	...	297	12·4	0·8	2·2	N.E.	11·15 p.m.
10	29·485	29·585	10 a.m.	29·432	7 p.m.	5	1	...	...	...	...	...	...	...	...	9	7	2	...	...	...	468	19·5	1·9	7·2	N.E.	6·55 p.m.
11	29·546	29·606	8 a.m.	29·491	2 p.m.	13	1	2	...	...	...	...	...	...	...	...	...	...	...	5	3	172	7·2	0·3	1·3	S.	11·45 a.m.
12	29·592	29·625	11 p.m. & 8 a.m.	29·536	3 p.m.	4	5	2	1	2	...	...	...	...	...	2	5	2	...	...	1	326	13·6	0·9	3·1	W.	12·15 p.m.
13	29·725	29·889	8 a.m.	29·615	3 p.m.	11	7	...	...	...	...	...	...	...	...	...	...	...	...	2	4	353	14·7	1·1	3·6	S.	9·40 p.m.
14	29·948	29·995	6 p.m.	29·908	1 p.m.	2	...	...	...	...	...	...	...	...	4	2	4	7	3	2	...	227	9·5	0·5	1·8	E.	6·27 p.m.
15	29·848	29·965	9 a.m.	29·791	4 a.m.	...	...	...	...	...	...	...	1	1	10	11	...	...	1	...	...	316	13·2	0·9	6·8	N.N.E.	9· 0 p.m.
16	29·653	29·782	9 a.m.	29·601	6 & 7 p.m.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	316	13·2	0·9	7·2	.....	10· 0 p.m.
17	29·756	29·855	11 & 12 p.m. & 7 & 8 a.m.	29·590	noon & 1 p.m	14	2	1	1	...	...	...	...	...	...	...	...	...	1	2	2	400	16·7	1·4	18·6	S.	2·18 p.m.
18	29·694	29·868	9 a.m.	29·460	8 a.m.	...	...	...	5	2	5	...	...	...	...	3	4	...	5	...	...	92	3·8	0·1	0·3	W.N.W.	4·25 a.m.
19	29·350	29·475	8 a.m.	29·246	4 p.m.	...	3	3	4	3	2	...	...	1	...	1	2	1	3	...	1	284	11·8	0·7	6·5	S.W.	12·30 a.m.
20	29·497	29·544	10 p.m.	29·464	5 p.m. & 8 a.m.	...	...	...	1	2	6	15	...	...	...	...	...	...	...	...	...	201	8·4	0·4	1·4	W.	11·17 a.m.
21	29·442	29·598	8 a.m.	29·348	3, 4, & 5 p.m.	4	3	3	6	1	2	3	...	1	1	...	...	...	...	...	...	271	11·3	0·6	9·2	W.S.W.	8·40 a.m.
22	29·718	29·778	11 p.m.	29·608	9 a.m.	3	1	1	2	...	...	...	...	...	...	...	...	...	13	3	1	212	8·8	0·4	1·8	W.S.W.	10·17 a.m.
23	29·754	29·860	7 a.m.	29·692	4 & 5 p.m.	7	2	...	2	...	...	...	...	...	...	7	4	1	1	...	...	305	12·7	0·8	2·9	N.E.	4· 3 p.m.
24	29·725	29·827	9 a.m.	29·724	4 p.m.	...	...	...	1	1	4	...	1	1	2	7	7	...	...	...	...	159	6·6	0·2	2·2	N.E.	5· 0 p.m.
25	29·616	29·775	9 a.m.	29·530	4 & 5 a.m.	...	...	1	1	1	...	...	3	3	9	4	2	...	...	...	...	342	14·3	1·0	7·2	N.N.E.	4·30 p.m.
26	29·673	29·952	8 a.m.	29·430	3 p.m.	12	...	1	...	...	1	4	2	...	...	...	...	...	...	...	4	524	21·8	2·4	18·6	S.	4·45 & 5·37 p.m.
27	29·970	30·024	9 p.m.	29·932	3, 4, & 5 a.m.	1	...	...	...	...	...	...	...	...	...	...	...	10	6	3	4	258	10·8	0·6	1·3	E.	11·45 p.m.
28	29·831	29·946	9 a.m.	29·717	4 a.m.	...	...	...	1	5	6	1	...	...	2	5	2	...	1	1	...	110	4·6	0·1	1·0	S.E.	2·55 a.m.
29	29·792	29·957	8 a.m.	29·665	3 p.m.	7	5	1	2	3	...	...	...	...	1	...	...	1	...	3	1	244	10·2	0·5	3·6	S.	12·15 a.m.
30	30·005	30·096	3 a.m.	29·941	4 p.m.	1	1	...	...	...	...	...	...	...	...	...	...	...	1	9	12	168	7·0	0·3	0·7	S.E.	4·10 p.m.
31	30·049	30·083	10 & 11 p.m.	30·013	4 p.m.	1	...	6	1	...	...	...	...	...	...	...	...	...	1	12	3	95	4·0	0·1	0·3	E.S.E.	3·27 p.m.
Sums or Means.	29·755	December 30th. 30·096	3 a.m.	December 19th, 29·246	4 p.m.	102	41	38	44	20	26	23	9	20	31	61	53	38	79	82	52	Sum 7642	Mean. 10·3	Mean. 0·6			

The self-regist ering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of DECEMBER, 1873.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., December, 1873.						Temperature in Shade.				For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds. 0-10.					Rain.				Evaporation in inches.
						Direction	Force 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·024	88·3	37·0	E.N.E.	...	...	99·5	77·0	111·4	64·5	0	0	...	...	18·596
Tenterfield ...	80	...	...	...	..	.....	...	...	...	...	...	...	...	...	...	...	...
Grafton	22	...	...	81·6	...	S.E.	0·5	5·0	94·5	68·7	109·7	49·4	8·820	8	3·240	29	11·314
Bourke	393	...	...	...	...	S.E.	1·9	1·6	...	76·6	...	66·9	0·960	2	0·940	26	...
Narrabri	196	...	...	80·0	...	W.	2·1	2·0	94·2	65·7	108·9	53·5	4·750	5	2·080	26	10·601
Armidale.....	80	3278	...	69·0	86 0	W.	1·7	5·3	78·1	60·1	94·2	50·4	3·100	9	0·900	1	5·171
Goonoo Goonoo	110	1550	...	73·7	...	S.	...	...	84·7	62·6	99·0	54·1	3·780	...	...	...	...
Port Macquarie	0	53	29·967	71·6	...	S.	1·8	6·0	77·7	65·5	83·8	57·9	25·070	13	8·080	5	5·090
Murrurundi ...	94	1545	...	72·1	...	W.	0·2	1·4	84·2	59·9	100·1	51·3	6·350	6	1·850	27	...
Cassilis	120	...	...	74·0	...	S.E.	0·6	0·5	86·7	61·4	104·1	49·2	4·180	9	1·680	29	7·667
Scone	78	...	...	...	...	S.	1·7	4·7	...	58·0	...	40·2	4·015	8	1·350	27	5·739
Muswellbrook..	68	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Dubbo	182	...	...	71·9	...	N.E.	...	...	94·7	49 1	112·9	31·9	...	...	...	...	...
Mudgee	121	1500	...	73·7	...	E.	1·1	...	86·6	60·8	99·4	52·0	1·230	3	0·760	29	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	3·550	11	0·990	28	...
West Maitland	18	...	...	74·7	...	S.	0·7	6·0	83·2	66·1	100·4	58·1	3·990	9	1·550	29	7·416
Lambton	7	...	...	70·2	...	S.W.	1·2	...	80·0	60·3	102·3	52·0	5·540	14	2·360	29	6·265
Newcastle	1	112	29·909	73·3	70·0	E.S.E.	0·3	4·6	79·5	67·1	102·8	55·3	4·150	10	1·860	29	...
Orange.....	124	2891	...	67·9	...	E.	1·5	3·2	81·3	54·4	95·7	42·4	0·900	4	0·570	26	5·112
Bathurst	96	2200	29·906	70·4	58·0	S.E.	1·5	4·6	89·4	51·3	101·5	40·0	1·160	4	0·480	26	...
Forbes	176	...	...	74·9	...	W.	0·6	1·6	86·9	62·8	98·2	44·1	...	...	...	...	...
Kurrajong	36	1870	...	62·2	...	S.E.	...	...	70·6	53·7	89·0	41·0	2·720	15	0·450	1	...
Mount Victoria	61	3490	29·866	65·1	66·0	S.E.	0·0	6·3	78·6	51·5	93·6	42·1	1·830	7	0·420	18	4·108
Woodford	50	2192	29·861	66·7	...	E.	1·0	...	73·0	60·3	88·0	48·6	3·690	14	1·500	29	...
Parramatta.....	16	...	...	...	...	S.E.	0·5	4·4	...	63·2	...	52·9	1·100	1	1·100	1	...
South Reef	0	...	...	...	...	S.	1·2	6·1	...	...	...	...	6·180	12	3·730	29	...
Sydney.....	5	155	29·931	71·3	71·6	S	0·6	6·9	78·5	64·0	100·1	56·5	4·425	13	2·604	29	6·928
Liverpool.....	16	...	29·953	69·6	...	W.	0·5	5·1	79·8	59·4	98·0	53·0	2·721	16	1·670	29	...
Wentworth.....	476	...	...	81·7	...	N.E.	1·7	3·0	100·0	63·4	113·8	50·5	0·970	5	0·760	19	13·587
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	2·140	12	0·850	28	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	6·010	11	2·150	3	...
Young	140	...	...	70·1	...	N.W.	0·4	...	87·6	52·5	102·0	35·1	0·400	4	0·130	20	6·130
Wollongong ...	0	...	...	70·4	...	S.W.	1·3	...	78·0	62·7	93·4	53·7	0·760	6	0·180	3	4·039
Moss Vale	31	...	...	63·8	...	W.	0·9	...	73·0	54·5	95·7	45·8	1·470	7	0·660	26	...
Goulburn.....	54	2129	29·944	67·3	64·0	W.	0·0	4·4	82·7	51·8	98·2	40·8	0·950	5	0·310	26	5·800
Terara	4	...	...	...	...	S.E.	2·1	5·6	...	...	...	...	1·600	8	0·920	29	...
Wagga Wagga	161	...	...	74·8	...	E.	1·3	...	86·6	62·9	108·1	51·9	0·640	2	0·420	20	10·306
Cape St. George	0	175	29·912	70·3	70·0	S.	1·8	6·4	78·6	62·0	90·2	54·6	3·100	8	1·320	14	...
Queanbeyan ...	60	...	...	66·1	...	E.	0·4	4·9	77·5	54·6	93·2	43·1	0·740	3	0·400	20	6·393
Urana	218	...	...	75·7	...	E.N.E.	1·0	1·4	87·7	63·7	112·5	52·1	0·570	2	0·390	20	7·025
Deniliquin	287	410	29·999	66·3	43·0	S.W.	1·7	2·3	92·8	39·8	108·3	22·2	0·470	2	0·410	19	...
Kiandra	88	4640	29·950	51·7	57·0	N.W.	2·8	3·3	71·9	31·5	96·2	19·3	2·800	6	1·900	20	...
Cooma	52	2637	...	64·8	..	N.	2·2	5·2	81·1	48·5	98·6	34·8	0·410	5	0·180	11	5·381
Albury.....	175	572	29·975	70·4	56·0	W.	0·7	2·6	90·2	50·5	105·4	39·3	0·650	2	0·500	19	...
Eden.....	0	107	29·941	67·9	61·0	N.E.	1·4	5·0	76·6	59·2	83·0	52·1	0·470	8	0·120	14	...

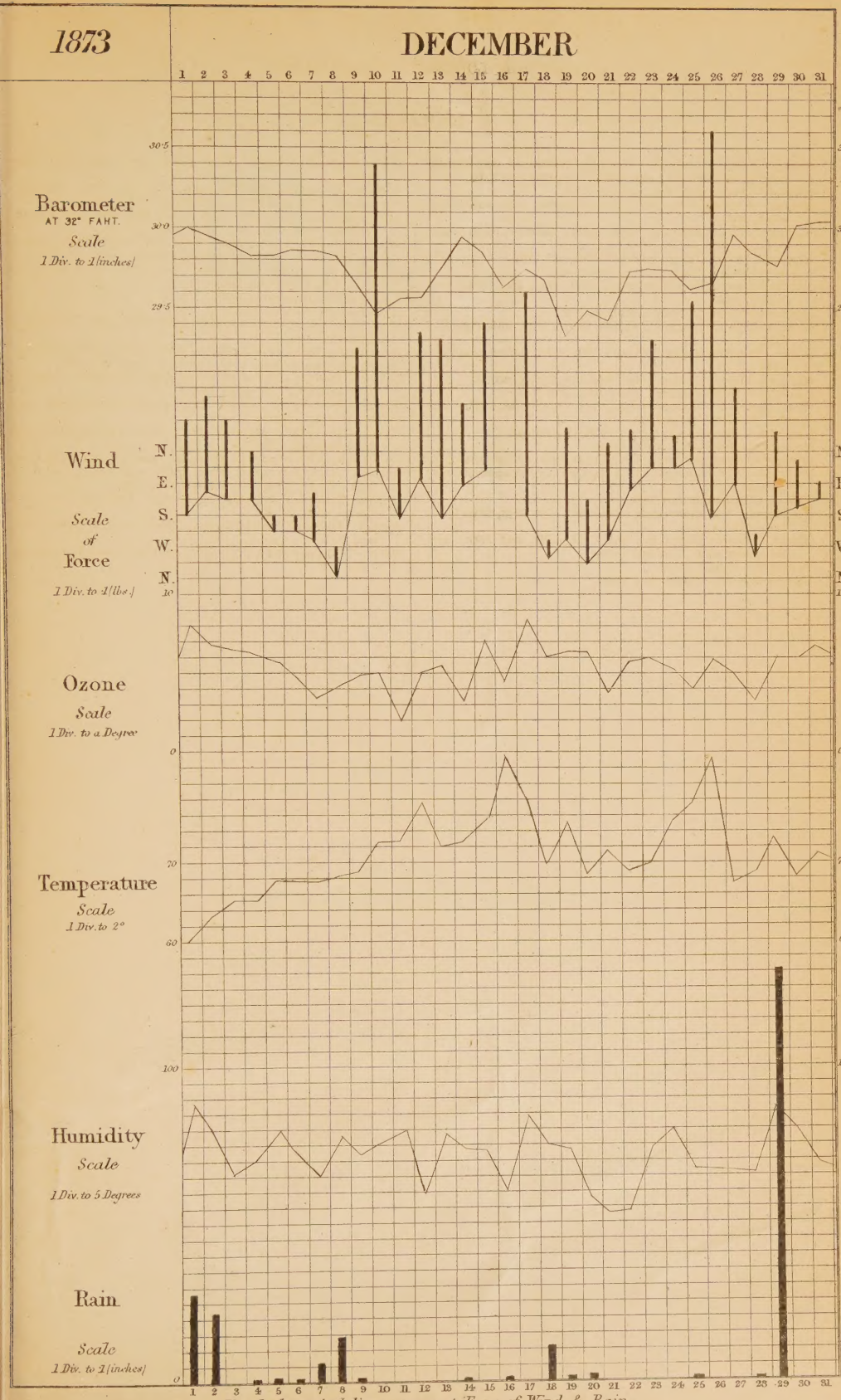
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Strong hot winds and electric storms during month; no rain fell; and gales, 2nd, 4th, and 13th.
Grafton—Heavy rain, 4th, and hot, 21st.
Bourke—S. gales, 17th, 19th; thunderstorm, 25th, and whirlwind, 30th.
Narrabri—Thunderstorms, 13th, 26th; stormy, 28th; and squally, 25th.
Armidale—Sultry, 23rd; and hot, 10th and 15th.
Goonoo Goonoo—Observations imperfect.
Port Macquarie—Thunderstorms, 11th, 25th, and 26th; and sultry, 14th.
Murrurundi—Heavy rain, 26th and 27th.
Cassilis—Thunderstorms, 12th and 26th. Hail with storm of 12th.
Scone—Thunderstorms, 11th and 18th; and meteor observed 13th.
Mudgee—Thunderstorm, 26th; and hot during month.
Dalwood—Thunderstorms, 17th, 24th, and 29th.
West Maitland—Thunderstorm, 17th; hurricane, 24th; and S.E. squalls, 1st and 3rd.
Lambton—Thunder and lightning during month.
Newcastle—Heavy S.E. swell, 9th.
Orange—Thunderstorms, 17th, 25th; and six meteors observed.
Bathurst—Hot wind, 16th; W. gale, 25th; and thunderstorms, 25th and 26th.
Forbes—Thunderstorm, 25th.
Kurrajong—Thunderstorms, 11th, 13th, 17th, 19th, 24th, 25th, and 26th.
Mount Victoria—Foggy, 1st, 5th, 13th, 17th, and 18th; and thunderstorms, 17th and 19th.
Woodford—Foggy, 18th.
Parramatta—Thunderstorm, 16th.
South Reef—Hot winds, 12th, 17th, 21st, 26th; and foggy 24th.
Sydney—S. squall, 13th; S. gales, 17th and 26th; thunderstorms, 17th and 26th; and lunar halo, 29th.
Liverpool—Thunderstorms, 1st, 17th, and 26th; S. squalls, 13th and 16th; and hot wind, 16th.
Wentworth—Thunderstorm, 10th; hot wind, 7th; heavy squalls, 27th; and hot during month.
Cordeaux River—Thunderstorms, 7th, 13th, 27th, 30th; S, gale, 27th; and hot, 28th.
Young—Thunderstorm, 25th.
Wollongong—Sultry, 12th.
Moss Vale—Thunderstorms, 14th, 16th, 17th, 25th; and foggy, 17th and 26th.
Goulburn—Heavy thunderstorm, 25th; and hot during month.
Terara—Thunderstorm, 15th; and hot, 26th and 30th.
Cape St. George—Thunderstorms, 25th and 29th; squally, 16th and 26th; W. gale, 19th.
Queanbeyan—*Faint Aurora*, 8th; thunderstorm, 16th; and hot during month.
Urana—Hot wind, 8th and 10th; very warm, 15th; and thunderstorm, 29th.
Deniliquin—Hot wind, 8th and 10th; and hot during month.
Kiandra—Thunderstorms, 10th, 16th, and 25th; storm of 25th killed a horse; and heavy fog, 19th.
Cooma—Thunderstorm, 10th; hot winds, 14th and 16th; and sultry, 6th and 9th.
Albury—Hail and thunderstorm, 12th; and hot winds, 16th and 25th.
Eden—Thunderstorms, 21st, 25th, and 29th; and hail-storm, 13th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney.

Dew 9th 16th & 25th